

Ms. Barbara Ellard
Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1

March 22, 2017

Dear Barbara,

NextEra Energy Canada, LP (NextEra) would like to take this opportunity to comment on the Independent Electricity System Operator's (IESO's) draft Market Renewal Benefits Case report, *The Future of Ontario's Electricity Market: A Benefits Case Assessment of the Market Renewal Project* (March 3, 2017), prepared by The Brattle Group (Brattle) for the IESO.

NextEra is generally supportive of the Market Renewal Initiative in terms of addressing issues that exist within today's Ontario's wholesale electricity market. We offer these comments based on our experiences participating in wholesale electricity markets across North America, successfully developing generation projects in Ontario, and now operating these projects as market participants within Ontario's wholesale electricity market.

This submission is organized by addressing specific comments regarding the draft Benefits Case report in the next few sections, and then addressing broader comments relating to the Market Renewal Initiative in subsequent sections.

Draft Market Renewal Benefits Case Results

On balance, NextEra supports the general conclusion that the Market Renewal Initiative can bring benefits to Ontario's wholesale electricity market.

However, we find the benefits case made for changes to the existing real-time wholesale energy market (i.e., Energy Workstream) to be more compelling than the benefits cases made for the Operability and Capacity Workstreams. NextEra is aware of the previous assessments done by the IESO and the Ontario Energy Board's (OEB's) Market Surveillance Panel (MSP) regarding inefficiencies in the real-time wholesale energy market regarding scheduling/dispatching of resources (i.e., generation, demand-response (DR), imports/exports) and pricing and settlements relating to the interplay of Hourly Ontario Energy Prices (HOEP), 5-minute Market Clearing Prices (MCP), and Congestion Management Settlement Credits (CMSC) with scheduling/dispatching resources. We support market design and rule changes towards increasing scheduling/dispatching efficiencies to improve generation operations within the real-time wholesale energy market and lowering of costs to customers. Any move to locational marginal pricing (LMP) and a Day-Ahead Market (DAM) must be assessed not only with the

goal of improving market efficiencies but also with regard to procurement contracts and their applicable contract provisions.

Based on our experiences in other wholesale electricity markets, we support development of mechanisms to improve operability and flexibility within Ontario's wholesale electricity market. Even though we believe there are operability benefits to be made within Ontario, the benefits case made for the Operability Workstream was less compelling than the benefits case made for the Energy Workstream mainly because of the lack of definition of potential future operability and flexibility mechanisms that could be contemplated for development within Ontario's wholesale electricity market.

Regarding the Capacity Workstream, we believe the benefits case may be overstating the impacts of moving away from procurement contracts to Incremental Capacity Auctions. The analysis of capacity benefits was mainly driven from capacity prices from PJM's Reliability Pricing Model (RPM) (i.e., Forward Capacity Market) and then applied to Ontario as proxies for future capacity prices that may result from Incremental Capacity Auctions. We are concerned that the Brattle analysis of capacity benefits does not sufficiently normalize capacity costs across the compared markets (i.e., IESO and PJM) as developing and operating projects in Ontario is more expensive than in the jurisdictions studied by Brattle.

Further, based on our experience, new demand response and gas-fired generation projects are the main resources being developed in response to U.S. Capacity Markets (in combination with energy and ancillary services markets and bilateral contracting), and therefore capacity has not been the main driver for the development of new renewable generation and new emerging technology (e.g., energy storage) projects. That is, other mechanisms (e.g., procurement contracts with utilities and/or government entities in response to public policy initiatives) have been the main drivers for the development of new renewable generation and new emerging technology projects. These facts are important to note considering Ontario's resource mix (i.e., significant share of renewable generation) and the Ontario Government's policies (e.g., climate change, etc.) because if a U.S. Capacity Market design were to be simply adopted by IESO without sufficient design changes to better ensure development of resources that best meet Government policies (e.g., renewable generation, conservation and demand management, etc.) only specific resources (e.g., demand response, gas-fired generation, etc.) may be secured.

Finally, the draft Benefits Case Report does not provide a sufficient assessment of the implementation costs that will be incurred by Ontario's market participants. Considering that the Market Renewal Initiative represents a fundamental re-design of Ontario's wholesale electricity market, high implementation costs are expected for most market participants. Therefore, we encourage IESO to work with stakeholders and market participants early in the next stage of the Market Renewal Initiative process to determine a reasonable range of likely implementation costs for market participants.

Greater Accountability for the Differences of Ontario's Electricity Market

In part, given that the approach taken within the draft Benefits Case Report is not a true cost-benefit analysis, the methodologies used to calibrate other market design studies (i.e., previous IESO studies, studies from other jurisdictions (i.e., MISO, CAISO, ERCOT, SPP)) require greater scrutiny. For example, the methodology used to account for differences between Ontario's wholesale electricity market and other markets have been 'scaled' to better approximate benefits to Ontario's market. Stakeholders need a better understanding of the options that were considered to account for the differences of Ontario's market when compared to other markets.

The points raised above introduce more general points regarding key differences within Ontario's wholesale electricity market compared to other jurisdictions and how these differences may or may not have been factored into the draft Benefits Case Report. Ontario's market structure and resource mix are very different than the other jurisdictions (i.e., MISO, CAISO, ERCOT, SPP) whose studies were used in the draft Benefits Case Report. Therefore, the draft Benefits Case Report should in some way address the following key differences for Ontario, and comment on whether these differences could impact the results of the benefits case.

- Do any of these differences need to first be addressed for Ontario's wholesale electricity market to realize similar benefits compared to other jurisdictions that have different market characteristics?
- Do these difference matter (e.g., dominant Ontario Government owned generator with rate-regulated assets; nearly no 'merchant' generators, as most generators in Ontario are contracted or rate-regulated; significantly less demand-side wholesale market participation; illiquid bilateral contracting market, therefore limiting hedging opportunities; etc.)?

Market Renewal Initiative and Procurement Contracts

NextEra appreciates the IESO's desire to ensure that Ontario's wholesale electricity market is as efficient as possible and will continue to meet future needs. As stated in our May 6, 2016 submission to the IESO regarding the Market Renewable Stakeholder Engagement Plan, we want to again stress that any changes to the current wholesale market design and rules must consider impacts to generation procurement contracts. That is, contract holders must not be put into any economic disadvantage resulting from changes brought forward as part of the Market Renewal Initiative. As heard at Market Renewal stakeholder meetings, we are encouraged by the IESO's recognition that consultations on any future changes to Ontario's wholesale electricity market design and rules cannot happen without corresponding discussions with generation contract counterparties regarding potential contractual impacts.

While the IESO has indicated throughout the consultation process that contracts will be respected, NextEra believes that more thought and consideration needs to be given to how potential market design changes and related Market Rule modifications may impact procurement contracts. There needs to be greater acknowledgement and understanding of how key procurement contract provisions (e.g., application of restoration of 'Supplier

Economics' resulting from changes to IESO Market Rules, etc.) may be triggered and addressed resulting from potential or planned changes to Ontario's wholesale electricity market design and rules.

Effective Market Oversight and Governance

Based on our experience operating within other North American wholesale electricity markets, an effective market oversight and governance framework should be adopted to better ensure accountability, transparency, and workability of Ontario's wholesale electricity market. This is especially so, considering the potential development and implementation of Incremental Capacity Auctions which could be the future mechanism to ensure new resource investment and maintenance of existing assets. That is, if Incremental Capacity Auctions are to replace (in whole or in part) procurement contracts (where contract terms and conditions provide for rights and protections for both contract counterparties), then market participants will need stronger regulatory assurances regarding the market rule amendment process and the process to which market rules are approved and put into force. Therefore, to ensure effective market oversight and governance, changes to IESO's market rule amendment process will be needed along with stronger and independent regulatory oversight (e.g., perhaps from OEB, similar to the U.S. Federal Regulatory Commission (FERC)).

For U.S. jurisdictions with centralized Independent System Operator (ISO)-administered Capacity Markets (i.e., NYISO, ISO-NE, and PJM), market oversight and governance is quite different from Ontario's framework. With respect to market rule amendments, ISO proposed rule changes are first vetted through stakeholder committees with voting representation of all market participants. If proposed rule changes are passed by respective stakeholder committees, these rule changes may then be vetted through a regulatory proceeding administered by FERC where stakeholders can intervene. Therefore, more frequent and a higher level of consultation, along with transparency, occurs in these jurisdictions, as well as FERC oversight and independent decision making authority. If Ontario is to transition from procurement contracts, effective and independent market oversight and governance should be developed mainly to help facilitate workable Incremental Capacity Auctions in Ontario.

Staged Design and Implementation

NextEra recommends that during the next stage of the Market Renewal Initiative that IESO and stakeholders first prioritize initiatives that are known to be present issues (e.g., inefficiencies within the real-time wholesale energy market that have been identified by MSP for several years as contained within multiple reports) and then focus on other initiatives that are less pressing and/or require more time to work through. The Market Renewal Initiative as presently defined is essentially a re-design of Ontario's wholesale electricity market, and such a potential fundamental change cannot occur all at once for various reasons. Therefore, to be pragmatic, priority Market Renewal initiatives should be addressed first.

Improvements to Stakeholder Engagement

Finally, to improve the Market Renewal Initiative, and to better address the points raised in this submission, we recommend changes to the Market Renewal stakeholder engagement. Because of the large scope of potential market design and rule changes, and the importance of future decisions (e.g., development of the Market Renewal Workplan), more frequent stakeholder meetings (both MRWG and all-stakeholder meetings) are needed along with additional membership within the MRWG to draw upon more wholesale market design and rules expertise within Ontario's electricity sector.

In closing, we are supportive of the IESO's Market Renewal Initiative and look forward to continuing to participate in the Market Renewal Working Group as well as the broader stakeholder discussions.

If you wish to discuss the contents of this submission, we will be pleased to meet at your earliest convenience.

Sincerely,



Jennifer Tuck, Director
Regulatory Affairs and Government Relations