December 16, 2016

On behalf of Hydro One Limited (Hydro One), thank you for providing an opportunity to make a formal submission to the Long-Term Energy Plan review process.

As stewards of Ontario's electricity grid, Hydro One's mandate is to provide safe, reliable, cost-effective electricity transmission and distribution. The Company carries out its business in every corner of this province and operates in places where no other utility can or will. Hydro One owns and operates the largest electricity transmission and distribution business in Ontario with total assets of $24B.

As you know, Hydro One is on a journey towards becoming a new customer-centric company. The Company's new Leadership Team, strong balance sheet and geographic service territory, along with the mandate to grow as a business not only aligns well with the government's plans for a stronger economy and electricity system, but uniquely positions Hydro One to help the Government of Ontario achieve its electricity, economic development and environmental goals.

Ontario has a distinct advantage over most other jurisdictions in having a vehicle for integrated energy and environmental policy planning through the Long-Term Energy Plan and Hydro One proposes that this vehicle is used to promote ideas that will empower customers and propel economic development.

As such, Hydro One is offering solutions to some of the critical challenges facing the electricity sector, including modernization and reliability, economic development, affordability and the importance of enhancing consumer choice.

A Modern, Reliable System

The size, strength and efficiency of our electrical grid are critical to reliability and Hydro One's ability to deliver electricity that sustains and secures the economic and social well-bring of every community in Ontario. However, the system is aging. The previous Long-Term Energy Plan focused on increasing transmission capacity in Northwestern Ontario, connecting remote First Nations communities and implementing timely local transmission enhancements as needs emerge throughout the province.

The current Long-Term Energy Plan should consider innovative solutions to increase the reliability of the system. This is consistent with the proposed review of the procurement model, aimed towards taking a technology-agnostic approach which will allow cutting edge innovations and engineering solutions to become a part of Ontario's modern electricity system.

As an example, microgrid applications consisting of renewable generation, energy storage and control are rapidly emerging as an opportunity for utilities. Hydro One is pursuing microgrid applications in a number of communities served including an island supplied with costly submarine cables and a First Nations community utilizing diesel. Further, Hydro One has been contacted by a residential community developer with a proposal to explore the co-development of a microgrid for a newly planned community in Southwestern Ontario.

Microgrid applications can provide energy self-sufficiency, improved reliability, reduced carbon footprint and potential to forgo costly replacements of submarine cables and above-ground infrastructure. In addition, these projects will help Hydro One establish knowledge and capabilities in deploying and operating microgrids for a variety of applications and to the benefit of all Ontarians.

It is recommended that the Government of Ontario contemplate regulatory approaches such as enabling the development and operation of microgrids, community net metering, storage and other innovative solutions to ensure Ontario's grid remains modern, reliable and affordable. Regulatory certainty on the treatment of innovation is desired to ensure that this work can continue into the future. Hydro One welcomes the opportunity to discuss options for the deployment of new technology with First Nations and the Government of Ontario.

Regional Economic Development

The electricity sector plays an essential role in powering Ontario's economy; where community and economic development begins, electricity infrastructure is sure to follow close behind. The Long-Term Energy Plan represents an opportunity to identify areas where energy policy can add value and help efforts to grow the economy, attract foreign direct investment and strengthen Ontario's competitive edge.

Serving over 1.3 million customers across the breadth of Ontario, Hydro One powers the province's largest manufacturers, sawmills, greenhouses and mines. The Company also powers the anchor tenants in rural and small-urban Ontario that make up the economic backbone of communities from Leamington to Kenora. For these communities, attracting new investment and winning the mandates that allow existing businesses to expand are what keep them vibrant and thriving.

The high cost associated with building and expanding electricity infrastructure in Ontario can send businesses elsewhere in search of lower cost opportunities. While the province's tradition of "user-pay" has been the basis of Ontario's regulatory regime, there are options that would reduce the cost burden and thereby increase the long-term viability of commercial and industrial businesses and their mandates in rural and small-urban Ontario to strengthen the province's diverse regional economic clusters.

Through Hydro One's participation in the Ministry of Economic Development and Growth's Investment Ready Program, along with the thousands of connections the Company has made with businesses across the province, there are some regulatory barriers to growth that, if softened, could make it easier to attract investment and stimulate growth.

Specifically, the Transmission System Code and Distribution System Code are exceptionally prescriptive in how electricity service providers manage the capital cost risks associated with expansion and connection. In both Codes, once a load projection is developed and revenue from future demand or consumption is factored in, the remaining capital costs must typically be paid up front in one lump sum. While this is designed to protect Ontario's rate payers from undue risk, the reality in many cases, is protracted work and pressure on customers to arrive at a financing solution. The cash-flow pressure associated with this regulatory requirement represents a deterrent to employers seeking to locate in the province or expand an existing facility.

It is recommended that the Government of Ontario grant more flexibility to utilities to manage the risks of capital cost recovery and flatten these costs over a longer period of time by directing the Ontario Energy Board to amend the Transmission System Code and Distribution System Code to have a positive effect on Ontario's industries. By implementing this solution, the Government of Ontario would respect the cash-flow pressures on new and growing businesses, and remove a barrier to economic development while not adding any additional costs to customers.

Affordability

The Government of Ontario has made significant efforts in recent months to provide rate relief to Hydro One's customers such as removing the provincial portion of the HST, changes to Rural and Remote Rate Protection and the Industrial Conservation Initiative. Hydro One believes, however, that additional support is still required for Ontario's residential, small business and industrial rate payers. Building on Premier Kathleen Wynne's commitment to lower electricity prices and Minister Thibeault's comments on alternative pricing plans, the distribution sector can apply its expertise and advice towards further bending the cost curve.

Ontario has put into place a series of policies designed to foster the growth of clean energy and conservation and demand management (CDM). The costs associated with these programs are substantially socialized through the price of electricity, specifically the Global Adjustment along with other significant clean energy costs supported under various provincial programs.

The Global Adjustment is now the dominant and fastest-growing component of electricity rates across customer classes in Ontario and forecast to continue to outpace other components of the electricity bill over the next five years. Putting aside upside pressure on other components of the price of electricity, this increase in the Global Adjustment will, albeit indirectly, result in further pressure on residential customers and will act as a disincentive to economic development opportunities. Further, increased costs can have the impact of reducing the ability of utilities, such as Hydro One which is sensitive to customer bill impacts, to make necessary investments in grid infrastructure and modernization.

The implementation of a cap and trade system in Ontario, along with the Climate Change Action Plan are welcome changes, but not without their challenges. For example, many related initiatives such as CDM programs whose costs are still covered by the Global Adjustment and other electricity bill mechanisms could represent significant increases to the cost of power. This comes at a time where indications from the new US Administration are that, not only will there be no carbon regime, but it is likely that there will a removal of regulatory burdens including the elimination of the US Clean Power Plan and a significant reduction in the corporate tax rate and other changes that will improve the investment climate in the US.

It is recommended that the Government of Ontario contemplate allocating a portion of the revenues from the cap and trade program to fund elements of the Global Adjustment or otherwise, provide a source of funding for the application of innovative solutions, CDM programs and critically-needed electric vehicle charging infrastructure. These features will materially enhance Ontario's ability to support economic development and deploy advanced electric grid infrastructure that integrates seamlessly with Provincial and Federal environmental sustainability objectives.

Consumer Choice

While affordability is a topic of considerable debate within Ontario's electricity sector, Hydro One believes that there are other opportunities to better serve Ontario's residential electricity customers by offering a broader suite of service options. By testing, supporting and offering alternative solutions that reflect Ontario's diverse customer profiles, there is an opportunity to closer tie Ontarians' consumption habits to their bill, permitting customers to better manage their energy use.

Hydro One has considerable data, insights and in-field studies that can be shared towards enhancing consumer choice and the Company welcomes the opportunity to work with the Government of Ontario, other utilities and the Ontario Energy Board on this critical work. Using Dynamic Energy Pricing as an example, Hydro One submitted an application to the Ontario Energy Board under the Regulated Price Plan Roadmap. The proposal offers customers commodity rate choices from a variety of options that best suit their electricity needs. This includes:

- Time-of-Use: Hydro One's pilot would consider rates with a much larger difference between the on-peak and off-peak prices as well as rates that do not have a mid-peak component.
- Critical Peak Pricing: Similar to Time-of-Use but with the option to charge a higher on-peak rate on a limited number of days annually when there is high system demand. The high critical price will be offset by a lower off-peak rate.
- Variable Peak Pricing: Similar to Critical Peak Pricing but with different tiers of critical prices that can be applied based on system need.
- Real Time Pricing: Prices are grouped into four-hour blocks and set based on the expected real-time electricity price. Prices are kept within an upper and lower band to avoid massive fluctuations in cost and customers are informed of prices in advance of the pricing period.

The pilot, if approved by the Ontario Energy Board, would test customers' appetite for assuming risk related to their commodity rate choice and help build the necessary billing infrastructure. Building on this collaborative work, it is recommended that the Government of Ontario direct the Ontario Energy Board to continue to explore further opportunities to enhance consumer choice with Hydro One and distributors.

Thank you again for providing this opportunity for early participation in the Long-Term Energy Plan. Hydro One is focused on making life better for our customers and welcomes the opportunity to work with the Government of Ontario.