

January 29, 2018

To: Power Advisory LLC Clients and Colleagues

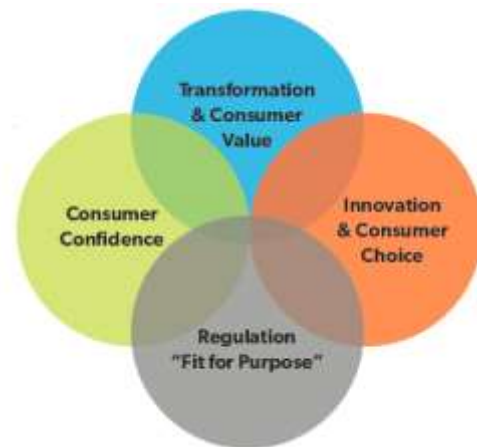
From: Alison Cumming and Travis Lusney, Power Advisory LLC

RE: Summary and Commentary on Ontario Energy Board's Strategic Blueprint: Keeping Pace with an Evolving Energy Sector

On December 18, 2017, the Ontario Energy Board (OEB) released its Strategic Blueprint ("Blueprint"), a guide for the OEB's work over the next five years. The Blueprint outlines four challenges that the OEB expects to encounter as the electricity sector transforms through 2022 and goals to address those challenges. The challenges presented by the OEB are: transformation & consumer value; innovation & consumer choice; consumer confidence; and regulation "fit for purpose." (see figure below)

Each challenge is customer-centric, which aligns with the OEB's consumer focus in their day-to-day operations. This memorandum provides a short summary of the Blueprint along with our commentary.

To support their claim that the sector is undergoing major transformations, the OEB highlights their observations of current trends and how those trends relate to their role as a regulator. The following is a summary of the trends.



1. The sector is experiencing fast-paced technological innovation with distributed energy and storage resources creating opportunities for customer generation and micro grids. These advances may challenge the traditional role of utilities could lead them to change their business models to accommodate customers or groups of customers generating their own electricity.

2. Innovation surrounding new renewable technologies has been driven by the need to reduce carbon emissions and mitigate the effects of climate change. As Ontario focuses on greenhouse gas emission (GHG) reductions through the new cap-and-trade system, obligations will affect natural gas distributors that the OEB regulates. The shift from fossil fuels to renewable energy will impact all electricity distributors that the OEB regulates. The potential for extreme weather events will result in a growing focus on system resiliency as well.
3. The OEB notes that the structure of the electricity sector has changed, and will continue to change due to mergers and acquisitions of Local Distribution Companies (LDCs) along with alternative business structures such as alliances and associations of LDCs to share services.
4. The 2016 Independent Electricity System Operator's (IESO's) Ontario Planning Outlook emphasized that current regulatory frameworks may have to change to keep up with rapid innovations in the electricity sector.
5. As customers are able to take advantage of new technologies such as use energy storage or distributed generation, focusing on customer expectations is critical.
6. In 2012, the Renewed Regulatory Framework was introduced and was expected to drive stronger customer engagement by utilities and a focus on long-term value for customers. However, the OEB has not seen utilities focus on long-term value for customers to the extent that was expected. Therefore, the OEB will assess the need for new approaches to consider innovative, low-cost solutions (e.g., traditional capital investments versus non-capital investments).

The OEB concluded that with the changes underway in the sector, a reactive regulatory approach to challenges that arise will not work in Ontario. However, they do not see a need to mandate a sweeping new business model for utilities to be prepared for the rapid change occurring in the sector (e.g., to better incorporate renewable technologies) because it may impede innovation. Instead, the OEB plans to prepare utilities and customers for changes in the sector and alleviate negative consequences from such changes through *support* and *guidance*.

The Blueprint provides details on the four challenges that the OEB will face in the coming years, the goal for each challenge, and how the OEB will achieve each goal. Each challenge is outlined below.

Transformation & Consumer Value

The OEB aims to strengthen utilities' focus on delivering value to customers as the sector evolves. Network and infrastructure investments may be necessary to support micro grids and renewable technologies as demand for such technologies increases. The OEB plans to remunerate utilities in ways that will incentivize their focus on long-term value solutions for customers. The OEB will also support regional planning and associations of utilities to share resources. New requirements for utilities to reflect sector changes in their system planning and operations may be implemented in the next few years.

Innovation & Customer Choice

The OEB intends to support LDCs as they embrace innovation in their operations. To achieve this, the OEB will look to reimburse utilities in ways that will encourage them to pursue technological innovations in their operations and services. Modernizing the OEB's rules and codes and addressing regulatory barriers to innovation will also be important steps to implement new technologies for consumers. Under the Regulated Price Plan, the OEB will continue to provide consumers greater choice in the way they pay for electricity.

Consumer Confidence

The OEB's goal for this challenge is to ensure that customers understand their rights and have confidence that regulators will protect their interests. One important way the OEB plans to achieve this is to continue to include customer participation in decision-making processes and proceedings, especially those related to rate changes. The OEB also plans to modernize utility customer service rules and to work with LDCs on customer pilots for new services and pricing models.

Regulation “Fit for Purpose”

The OEB states that they have the resources and expertise needed to address the changing electricity sector. The success of their customer-centric strategy will depend on ensuring access to expertise, providing staff with opportunities to understand sector changes, continuing to engage with LDCs, and continuing to serve as an expert advisor to the government on energy policy issues.

The Blueprint affirms that for the OEB, customer interests are key and LDCs will be compensated for keeping that interest central to their operations. As reducing GHG emissions becomes the driving factor for a shift toward renewable technologies, LDCs will be expected to keep pace while simultaneously providing low cost solutions.

OEB Strategic Goals and Objectives: 2017 to 2022

Strategic Challenges	Transformation & Consumer Value	Innovation & Consumer Choice	Consumer Confidence	Regulation "Fit for Purpose"
Strategic Goals	<ul style="list-style-type: none"> Utilities are delivering value to consumers in a changing environment 	<ul style="list-style-type: none"> Utilities and other market participants are embracing innovation in their operations and the products they offer consumers 	<ul style="list-style-type: none"> Consumers have confidence in the oversight of the sector and in their ability to make choices about products and services 	<ul style="list-style-type: none"> The OEB has the resources and processes appropriate for the changing environment
Strategic Objectives	<ul style="list-style-type: none"> The regulatory framework incents utilities to focus on long-term value for money and least-cost solutions Regional and utility system planning reflect the continuing evolution of the sector Utility infrastructure is optimized during the shift to a low carbon economy 	<ul style="list-style-type: none"> The regulatory framework incents and enables utilities to adopt innovative solutions The design of network rates and commodity prices support the efficient use of infrastructure and enable greater customer choice and control Our codes and rules reflect the needs of an evolving sector 	<ul style="list-style-type: none"> Consumers understand their rights and choices Consumers are treated fairly by utilities and other service providers Consumer perspectives are welcomed, respected and addressed in all regulatory processes The benefits of innovation and sector transformation are realized by all types of consumers 	<ul style="list-style-type: none"> We have the expertise needed to address sector evolution Our own organization and processes remain flexible and are adapted to changing needs Our work is supported by effective engagement and collaboration

Power Advisory Commentary

Power Advisory generally agrees with the trends identified by the OEB in their Blueprint. In particular, the rapidly falling costs of distributed energy resources (DER) (e.g., solar, energy storage, etc.) offers consumers an option to manage part or all of their electricity needs outside of the traditional LDC framework. The OEB in recent consultations (i.e., EB-2015-0043 Rate Design for Commercial and Industrial Electricity Customers: Aligning the Interests of Customers and Distributors) has stated the objective of “ensuring value of connection to the Ontario electricity system”. In short, this means that LDCs and the OEB must strive to ensure that the cost for consumers to remain connect to the Ontario electricity system is greater value than the cost of going disconnecting ('off-grid'). Therefore, the challenge for the OEB and LDCs is to determine how existing electricity infrastructure remains a safe and reliable delivery model for consumer’s electricity needs while supporting greater consumer choice in alternative delivery methods. One option would be to increase the utilization of the existing electricity infrastructure through new control methods and leveraging the beneficial attributes of DERs (e.g., the flexibility of energy storage facilities to reduce constraints during peak demand hours).

The release of the Blueprint is consistent with the Ontario Government’s 2017 Long-Term Energy Plan, which emphasized the need to adapt to technology innovations and provide greater value and choice to customers. The Blueprint is also anticipated to be a key input with respect to the newly established expert panel considering the modernization of the OEB, which was announced December 14, 2018 by the Minister of Energy. Power Advisory continues monitor these initiatives and is available to provide additional support to clients on these matters as required.