Ontario Energy Board Draft Report – Rate Design for Electricity Distributors (EB-2012-0410)

CanSIA submission on rate design and revenue decoupling for distributors
June 9, 2014

Relationship to parallel submissions

This submission focuses on solar photovoltaics and net-metering which is of key interest to CanSIA. This submission covers a relatively limited set of issues, and is intended to supplement the associated master submission, prepared jointly by APPrO and CanSIA, which covers rate design and revenue decoupling points more generally.

Solar Photovoltaics and Net-Metering

Solar energy is the preferred electricity self-supply source of Ontario's consumers. Additionally, the Ontario and global solar energy market is on track to achieve grid party, whereby solar energy is cost competitive with other energy sources, thus creating a financially sustainable market for solar energy.

Ontario is moving towards a smart grid vision, whereby electrical procurement is transitioning from a centralized generation model to a more decentralized and distributed generation model and grid system. Consistent with Ontario's vision for a smarter electricity grid, solar energy will play a lead role as a source of distributed power as it creates power when it is needed most, during peak periods of electricity demand (e.g., peak shaving).

CanSIA supports Proposal 3 as it is the most effective and efficient approach to enable a robust future net metering model, thus providing value to the empowered consumer and the grid system as a whole.

Distributed solar generation directly serves customers' loads and supplies excess generation to the grid. The Board has properly recognized that rate design must send the correct price signals to customers who engage in self-supply, so that they contribute their fair share to the costs of maintaining a reliable electricity system. In a world with significant customer-sited generation, the future costs of distribution will not be simply a function of the number of customers or of the size of customers' connections to the grid (which may have been chosen years before the customer decided to install generation). Instead, distribution capacity needed to provide reliable service will depend on, and will be driven by, the loads which customers place on the system net of the output of their generation. As a result, it is CanSIA's view that Proposal 3 best supports a system in which customers will both consume power from, and provide power to, the distribution system.

For example, a solar customer whose generation produces a significant amount of energy coincident with peak summer load may require significantly less capacity to be served than a comparable customer who has not invested in generation. Therefore, the adopted rate design needs to signal to the customer, who installs generation, that the investment will produce cost savings from the distribution capacity that will no longer be needed and that instead can be re-directed to serve load growth or another user. The rate design also should signal to the distributor that they can plan to provide less capacity than they would have needed absent the customer's self-generation, thus saving costs and improving efficiency in the long-term.

Net metering has been specified as a policy objective in the LTEP. CanSIA supports the concept of moving towards a net metering framework in Ontario. Net metering is a system in which solar panels or other renewable and distributed energy generators are connected to a utility grid system and surplus electricity is transferred onto the grid, allowing customers to offset the cost of electricity drawn from the utility. In combination with trending towards solar grid parity and transitioning to a smart grid future, net metering provides a complementary framework and mechanism to allow electricity customers and generators to choose, create and control their own power.

Net metering provides a simple, customer-focused means to account for the customer's self-generation net use of the electric system. Net metering's success in many U.S. states in facilitating the growth of distributed generation is largely a result of its simplicity, certainty and transparency for the customer. It is a method that customers understand (i.e., "running the meter backward") and that they view as inherently fair. At the same time, it is also important that net metering should be fair to distributors and to customers who do not install generation. Net metered distributed generation should not result in either revenue erosion for distributors or a cost shift to other customers. To accomplish this, it is vital that the rate design used in conjunction with net metering send accurate price signals concerning the costs which all customers impose on the system through their use of distribution capacity, whether or not they have installed self-generation. This is best accomplished through rates based on customer's net usage during the peak hours – the usage which is a primary driver of distribution costs to provide system capacity. CanSIA agrees with the Board that Proposal 3 is best suited to encourage the growth of distributed generation using net metering, and to do so in a way that is equitable to the utility and all of its customers.

CanSIA looks forward to working with the OEB and other energy agencies and organizations to assist with and discuss addition rate design, cost allocation and net-metering proceedings, to ensure that solar energy and distributed generation plays a more important role in creating a smarter, and more reliable, robust and safe grid system.