

**Remarks**

**by**

**Paul Shervill**

**Vice President, Conservation**

**Ontario Power Authority**

**to**

**Smart Energy Canada**

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I'm going to focus for the most part on the question, "Can the smart grid deliver on its promise?" But I will briefly touch on the question, "How will Canada meet the challenge of creating a green energy sector?"

The Power Authority has a central role to play in implementing a new piece of legislation called the Green Energy and Green Economy Act, known in short as the GEA.

The Green Energy Act is focused on promoting conservation and renewable energy across Ontario. The Power Authority works with local distribution companies, the Ontario Energy Board, the Independent Electricity System Operator, the government and many others to foster conservation and energy efficiency. We are also promoting renewable energy through the Feed-in-Tariff or FIT Program and the microFIT Program.

In everything we do, focusing on the consumer's perspective is a key priority. And we believe that consumers need to become much more engaged in Ontario's electricity system to benefit from the many new opportunities available to them through the GEA. The development of a smart grid represents an important potential opportunity to achieve this.

Essentially, the smart grid will enable consumers of all types to have a much more active role in the electricity system. And this is critical, not only to building a greener, renewable future for the province, as envisioned by the

GEA, but also to helping consumers manage their electricity costs in an environment of rising prices.

The GEA sets the framework for a smart grid to enable:

- change in consumer behaviour
- connection of more renewable generation
- and the opportunity for greater innovation in the sector.

Let me briefly take you through each of these points in greater detail, starting with enabling change in consumer behaviour.

The smart grid will enable consumers to be better informed about electricity prices and their own use of electricity, and therefore more able to effectively manage their electricity use and their electricity costs. There is a strong connection between development of a smart grid and promoting conservation and energy efficiency. And the link is the smart meter, time-of-use rates and a range of new technologies to manage their consumption in real, or near real time.

We estimate that smart meters and time-of-use pricing will deliver about 390 megawatts of peak demand reduction by 2027 – and most of these savings will occur earlier in the planning period. The intent is that it will drive more permanent behaviour change and help to begin establishing a true culture of conservation in Ontario.

I'll move now to my second point – that the smart grid will enable the connection of more renewable energy. Again, enabling customer

engagement is the key. Through the Feed-in Tariff or FIT Program and the micro-FIT Program, homeowners, businesses, schools, Aboriginal groups, community groups and others are now able to participate in the electricity grid in ways they may never have imagined. They can earn revenues by generating their own renewable energy and selling it to the grid at attractive prices and under long-term contracts – 20 years or more.

My third point is that the smart grid will enable the development and integration of innovative new technologies.

It will allow, for example, the development of an intelligent charging infrastructure to support electric vehicles. And it will provide for the storage of electricity via electric vehicle battery systems and other demand response technologies, which will help increase the reliability of supply.

The smart grid will also serve as a platform for technological innovations that will assist consumers with using electricity wisely. These innovations are in development today, many being pioneered right here in Ontario, to help customers manage their electricity use more efficiently and conveniently in the near future.

So can the smart grid deliver on its promise? Absolutely, we believe so. It offers the opportunity for a democratization of the power system.

The key is to ensure that it develops in a coordinated way. Technologies and the related standards are still evolving across North America. We will need

to incorporate technologies that are able to communicate with one another. And standards need to be open and facilitate inter-operability.

Coordination and cooperation have always been a feature of Ontario's electricity sector, and today collaboration is even more critical for the successful implementation of a smart grid in this province.

Educating consumers is another key element to success. Consumers need an appreciation of the possibilities afforded by the smart grid. This will be an important role of the local distribution companies.

In response to how Canada will meet the challenge of creating a green energy sector, I would point to Ontario's Green Energy Act. It's the foundation for building a green and renewable future for Ontario. While we are still in the early days of implementation, the response to the initial launch period for the FIT program has been tremendous. There is lots of interest across the province in developing renewable energy – not just by the traditional developers, but by homeowners, small businesses, Aboriginal groups, communities and institutions like schools and churches.

I believe Ontario's GEA will serve as a model for other jurisdictions in Canada and around the world.

Thank you.