

Standing Committee on Public Accounts – Opening Statement – November 16, 2016

Deputy Minister Imbrogno and Michael Reid will begin by talking about the new planning process and the upcoming LTEP and will then defer to Bruce to speak to the IESO's role.

- Thank you Deputy Minister. Good afternoon. *[Introduce Mike and Terry if the DM did not already.]*
- I'm going to talk a little bit about the IESO's role in the new planning process, the findings of the Ontario Planning Outlook report, and our regional planning process.
- In September, the IESO submitted the Ontario Planning Outlook, or OPO, to the Minister. It provides both a 10-year review (2005-2015) and a 20-year outlook (2016-2035) for Ontario's electricity system.
- The OPO is providing the planning context for the government, industry stakeholders and the public, serving as an early input into the government's Long-Term Energy Plan engagement process.
- The report can be found on our website, along with a series of modules that provide a detailed breakdown of the assumptions, facts and figures underpinning the report.
- As we heard from the Deputy Minister, the government is conducting engagement sessions across the province to obtain feedback for the next Long-Term Energy Plan. The IESO is supporting these efforts by presenting the findings of the OPO to help facilitate informed discussion.
- I'm very proud of our report and I'd be remiss if I didn't acknowledge the great work Mike and his team did to put this together. Mike and his team looked out at the coming 20 years and put together a report that does a heck of a job considering all of the different factors that could impact supply and demand over that period—no easy task.
- The Ontario Planning Outlook concludes that Ontario is well-positioned to meet provincial needs into the next decade, while continuing to adapt to the changes occurring across the sector.
- In developing the Ontario Planning Outlook, we considered a range of demand scenarios that could evolve for Ontario's future electricity system. Uncertainty is inherent in any forecast, particularly one 20 years into the future, where there is increased uncertainty about how people will consume electricity and how the economy will develop and adjust to climate change policies.

- In fact, we see accelerating change over the decades ahead. For the IESO, one of the most critical priorities will be to ensure continued reliability given the large number of moving parts. These include:
 - the continued expansion of renewables
 - nuclear refurbishments at Darlington and Bruce
 - growing consumer engagement and behavioural changes
 - continued growth of embedded resources
 - and the evolution of technology and innovation.
- This changing landscape provides important context for the planning work we do, its value, and the new planning process the government has put in place.
- Looking ahead, Ontario's nuclear fleet will continue to provide a vital role in the province's energy mix. In 2015, nuclear power accounted for 60 percent of the electricity generated in the province and is expected to continue to provide the majority of the supply over the longer term.
- The role of renewable energy sources will continue to grow. By 2025, renewable resources such as wind, solar, bioenergy and hydro facilities are expected to make up nearly 50 percent of Ontario's installed generating capacity.
- Much of the growth in renewable energy will be connected to the distribution system, and distributed energy resources are also being promoted by some communities in the context of ongoing regional planning activities across the province.
- Evolutions in technology are expanding opportunities for customer choice and participation in Ontario's electricity system. We are seeing a transition towards a system more characterized by two-way flows as well as more and more distributed energy resources.
- To understand what this means, the IESO has partnered with PowerStream to study how we can enhance reliability and efficiency through a coordination of IESO and local distribution company-controlled resources.
- At the same time, the IESO is funding an exciting new pilot project, PowerStream's POWER.HOUSE project, where 20 homes have been equipped with solar-storage systems that will be collectively managed by the local utility. These systems will respond to electricity prices, turning on both solar and storage power to reduce consumption from the bulk grid.
- This is an example of how consumers are participating in the electricity system like never before. We're making great progress in establishing a culture of conservation, while demand management and load displacement are proving to be cost-effective resources that

are being leveraged in a variety of ways to benefit individuals, industries and the province as a whole.

- And, building on Ontario's smart meter infrastructure, data-driven apps and solutions are already delivering new insights into consumption patterns and supporting better decision-making about how and when to use electricity.
- In addition, micro-grids are being developed in Ontario for their ability to increase local resilience and support added reliability, especially during destructive and damaging storms. They also offer increased ability to connect and manage variable local renewable resources.
- The point I want to convey is that, to plan for the future, with all of the change we're seeing, it's critical that we have a thorough planning process in place that invites discussion from a broad range of stakeholders.
- A lot of the changes I've just spoken about—increasing consumer choice, smart homes, and microgrids, for example—are having an impact at the distribution system level. And when we talk about the distribution system, we're talking about within local distribution company territories, such as Toronto Hydro, Fort Frances Power, and Milton Hydro.
- That's why it's becoming increasingly important to have a regional planning process in place that can address electricity related needs that are specific to certain regions. To give you a more complete picture of planning in Ontario, I'll explain how regional planning works.
- Regional planning is a key priority for the IESO. The process involves developing Integrated Regional Resource Plans, which are 20-year electricity plans that look to ensure a reliable electricity service to local distribution companies and directly connected industrial customers. The plans consider conservation, generation, transmission, and distribution solutions.
- Regional planning is an Ontario Energy Board mandated process. The province is divided into 21 electricity planning regions, some with one or more sub-regions. Regional planning is conducted for each region every five years, unless a need deems that it start earlier. Plans include recommendations to address the near-, mid- and long-term timeframes.
- Accessible from the IESO's website, each of the regions has a dedicated webpage and subscriber list where interested parties can subscribe for updates. The IESO is continuing to improve the regional planning process and is broadening the evaluation criteria used for regional planning and engaging on this with the Local Advisory Committees and the public.
- Engagement is a vital component to the process, which involves transmitters, local distribution companies and the IESO working collaboratively. The engagement related to

regional planning provides a voice for municipalities, First Nation and Métis, associations and stakeholders to express their priorities and preferences for the growth of their communities.

- Engagement begins with introductory meetings with municipal staff, and First Nation and Métis, held locally in the area/community.
- The establishment of the Local Advisory Committees, or LACs, is an important part of the regional planning process as members provide valuable input which is current and based on a local perspective.
- LACs are comprised of up to 18 members, representing municipalities, First Nation and Métis, consumers, the business community, and environmental and conservation groups. In areas where there are a large number of First Nations communities, a First Nation LAC is also established. Broader public engagement will also be used to get input into the process.
- To summarize... we have an extensive planning process that has a few layers to it. In a sector that is constantly evolving, it's important that we have the processes in place—and work collaboratively with businesses, municipalities, First Nations, and the broader public—to ensure we're adequately prepared to meet future needs in a cost-effective manner.