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Remarks By Colin Anderson

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To

A C.D. Howe Institute Roundtable

Thank you for that very kind introduction.

I am pleased to have been invited back to speak at the C.D. Howe Roundtable for a third time, particularly after my last presentation just a little over a year ago. Back then I was Deputy Minister of Finance and I gave an overview of the recently released Ontario Budget. I recall admonishing the crowd for not doing more to promote GST harmonization, which at that point was not even a glimmer in the eye. And lots of us had given up hope.

A lot can change in a year.

Here I am a year later, now CEO of the Ontario Power Authority, which is at the centre of an historic transformation for electricity in this province.

People often ask me why I left my old job, because it was certainly a great job. The reason I left and went to the electricity sector is because it is such an exciting time to be in the sector. The planets are aligning in a way that doesn't happen very often and giving us lots of opportunities. We have aging infrastructure that needs to be replaced and we're phasing out all of our coal-fired generation. We need to build new infrastructure to meet demand and future demand growth. This is happening right at the time of an economic downturn, and any stimulus package that you look at has infrastructure investment in it.

Combine that with the fact that citizens in general are becoming even more engaged, concerned and knowledgeable about environmental issues, energy issues and economic issues and better understand that there is a real inter-connectedness of all of those elements. Put that all together and we have both will and opportunity.

We also have an enthusiastic Minister and a government that's committed to making Ontario a world leader in energy – and willing to back up this vision with legislation and other mechanisms. So you take all of those things together – and they often don't happen all at the same time – and this a great time to be in the electricity sector. In fact, the electricity sector is one of the few bright spots in the economy right now.

So, on to today's topic. I want to talk about the recent legislation because obviously that's driving a lot of what we do – the Green Energy and Green Economy Act – and about how it is going to affect not only Ontario but the energy sector and the economy in general. We should probably start off first with a little bit of who the Ontario Power Authority is, because people often confuse us with Ontario Power Generation or some of the other electricity organizations.

Our job is to maintain a reliable and sustainable electricity supply for the province. To accomplish that, we really focus on three different areas: conservation and energy efficiency, long-term planning for the province – we are responsible for the 20-year plan – and procurement of new supply – including, obviously, renewable energy.

We are making really good progress. We are going into a summer where for the first time in a long time we do not have to keep our fingers crossed about how we are going to do on the electricity front, where in fact we expect to do pretty well until about 2015. The Power Authority has about 12,000 megawatts of supply under contract so that is quite a lot of progress in a very short period of time. The Ontario Power Authority has only been around for four years now.

The Green Energy Act has two tracks – one that has gotten a lot of attention, the renewable energy track, as well as one that focuses on promoting energy efficiency and conservation. The Act supports Ontario's goals of ensuring a reliable and sustainable electricity supply, as well as focusing on creating jobs and contributing to climate change initiatives.

So the mandates of the Power Authority and the Act are closely aligned.

For us, conservation is always the first on the list, not only in the long term planning that we do but also in the local solutions that we look at for individual communities. There are many reasons why we put conservation first on the list.

Obviously, every kilowatt that is saved is one that doesn't have to be generated or transmitted. That's good for the environment since it prevents increases in greenhouse gases and other harmful emissions.

But it also makes good economic sense. Conservation programs are generally cheaper and quicker to implement than new generation, sometimes politically easier and they certainly enable program participants to save on their energy costs. In some cases, such as the Power Authority's demand response programs for industry and businesses, they actually generate revenues.

Conservation also helps to create green jobs. A recent study we commissioned estimates that more than 57,000 person-years of employment will result from our investments in energy efficiency, demand management, fuel switching and customer-based generation. In general, those jobs are well paying.

While I'm on the subject of conservation, I did want to mention that last month we had Ontario's second Energy Conservation Week. We're working up to our Count Me In Challenge Day on August 14, which is the sixth anniversary of the black out. What we hear a lot is that people know about changing their light bulbs and that kind of thing but they don't always know what they can do next. So we chose a theme "Count Me In" and I've brought some of our "100 ideas to save energy" posters and I'm wearing my Count Me In sticker. I encourage you to take the Count Me In pledge at countmeinontario.ca and to encourage your co-workers, friends and families to also take the pledge.

It's essential that everyone gets involved. Ontario has the most aggressive conservation targets in North America – some say the world. Ontario's target is a reduction in peak demand of 6,300 megawatts by 2025. That's equivalent to removing one in five households off the grid. So it is very ambitious. When you combine that with the fact that we are getting out of coal, the single biggest climate change initiative in North America is happening right now, right here in this province.

The Green Energy Act will boost the effort across Ontario to move even further on that target -hopefully being able to accelerate it – through changes to the building code and energy efficiency standards and a number of other things.

The Green Energy Act is looking at changing some relationships, roles and responsibilities. The local electricity utilities have always been on the front line in delivering conservation programs – which makes sense given their close front-line

relationships with their customer base. Now, under the Green Energy Act, they are going to be assigned conservation targets and they're going to contribute explicitly toward those 6,300 megawatts through very specific targets, which will be a condition of their licencing.

We are going to be working with the Ontario Energy Board to help set the conservation targets and we'll work with the LDCs to help them meet those targets. In some cases, we will be delivering our own programs, but the bottom line is that we will all be working more closely together – each of us doing what we do best – to help meet or even exceed the target and build a culture of conservation in the province.

The Green Energy Act also provides tools to help expedite progress in the development of a smart electricity grid. A smart grid will use advanced information systems and equipment to allow the two-way flow of both information and electricity. This will enable the increased use of conservation, demand management and renewable resources on the system.

More than two million smart meters have been installed across the province, and by next summer, one million Ontario households will be on time-of-use rates.

Smart meters, together with time-of-use pricing, are going to help create smarter energy consumers. This combination is going to enable consumers not only to better understand their use of electricity but help them to better manage it by providing incentives to shift their use to off-peak demand times. It really does offer customers a new level of engagement and a new level of control over their electricity use.

Another shared objective of the Green Energy Act and the Power Authority is increasing renewable energy generation in Ontario.

In fact, under the Green Energy Act, the Power Authority is responsible for designing and implementing North America's first comprehensive Feed-in Tariff Program. A feed-in tariff, or FIT, is a simplified way to contract for renewable energy generation.

Our goal, through the long term plan we have been working on, is to at least double renewable energy sources – wind, solar photovoltaic, water and bioenergy – helping to replace the coal-fired plants being phased out by 2014.

The Feed-in Tariff Program is designed very deliberately to encourage investment in renewable energy projects. It will offer standardized prices under long-term contracts – 20 years generally, 40 years for water projects. The prices are designed to cover all capital, operating and maintenance costs while offering a reasonable rate of return over a set contract period. It provides a lot more certainty to developers and planners, and it will help position Ontario as a good place to invest.

In designing the program, we consulted extensively with a wide range of stakeholders, including renewable energy developers and ratepayer groups, in technical sessions that were held from March through to May. All of the feedback we received has been extremely helpful in shaping the program.

In developing prices for the various technologies, our aim is to balance the interests of project developers and Ontario's electricity ratepayers. In other words, we want to promote broad participation in the program and at the same time keep costs reasonable for consumers, who are footing the bill.

The program is divided into two streams: the FIT Program is for renewable projects capable of generating more than 10 kilowatts of electricity. The microFIT Program is for small projects that can generate 10 kilowatts or less, such as solar PV panels installed on the rooftops of homes and small businesses.

Local utilities will be responsible for administering the microFIT program. Since this is a new area for the utilities, it presents new challenges and opportunities. The Power Authority is working closely with them to provide support and ensure as smooth a transition as possible.

In addition to the feed-in tariff, the Green Energy Act introduces a streamlined process for renewable energy approvals, and allows municipalities, local utilities and community-based organizations to develop their own small-scale renewable generation projects.

It provides for the creation of special funds for Aboriginal and community-based projects to help them overcome the specific hurdles they face, such as lack of access to knowledgeable advice and lack of access to early-stage development funds. We are going to provide these communities with special price incentives under the FIT Program to help level the playing field.

We see First Nation and Métis communities as critical to achieving Ontario's conservation and renewable energy goals. The OPA is working with these communities to provide them with needed tools and resources as well as to identify emerging opportunities, which could run the gamut from implementing conservation programs to developing, constructing and operating generation and transmission projects.

So the barriers are coming down and there are opportunities for new participants in the energy sector.

Not surprisingly, interest in developing Ontario's future renewable energy supply is high. More than 150 developers responded to a recent survey, indicating the potential for more than 15,000 megawatts of renewable energy projects under the FIT Program. That's almost half of Ontario's current installed capacity from all sources of generation. And this survey was undertaken before we went public with the FIT Program. I suspect there's even more interest now.

The high level of interest underscores the need for new transmission and distribution infrastructure. We've been working more closely than ever with Hydro One, the Independent Electricity System Operator and the Ministry of Energy and Infrastructure to figure out how to prioritize and best expand the grid so these projects can be connected. The Green Energy Act incorporates a feature of must-connect, for example. The province has already committed billions of dollars to make this happen. And there's more to come.

Right now, the transmission system can connect about 2,500 megawatts of additional generation. Once the new transmission line being built from the Bruce peninsula area to Milton is in service, another 1,500 megawatts of capacity will be added, bringing the total to about 4,000 megawatts of transmission capacity. At a cost of between $1 million and $3 million per MW, that represents a minimum of $4 billion in transmission infrastructure investment coming very soon, and we anticipate signing contracts for this in August and September.

So, you're probably wondering where we are in terms of launching the FIT Program. We are now testing our online applications, forms and website. We are finalizing details with the Ministry of Energy and Infrastructure, and we just posted our draft Feed-in Tariff contract last week. The rules will follow, and we will probably have one more workshop.

The Power Authority is largely ready with the parts under our purview. But there are still a few key details to be finalized. These include:

- The Renewable Energy Approval process, which has been posted on Ontario's EBR Registry for a 45-day comment period
- Domestic content, to be determined by the Ministry of Energy and Infrastructure
- Environmental attribute ownership.

On that last item, the Power Authority's position is that because ratepayers are paying premium prices for the electricity, it's appropriate that they keep the benefits of the environmental attributes associated with new renewable energy contracts. So for now, we're holding them.

I've heard a wide range of views on this subject. Some environmentalists have said we should "retire" them. Other say we should participate in voluntary markets and sell the attributes, and put the proceeds back into the rate base. Made in Ontario offsets are hard to find and the Power Authority has some. We could also gain experience before the U.S. introduces its regime – whenever that will be.

Still others say we should differentiate the carbon capture from the electricity. For example, energy from waste captures what would otherwise be released into the atmosphere. Farmers argue that carbon gets captured in the soil that never leaves the farm. Of course, the recent cap-and-trade legislation has to be taken into consideration. So stay tuned, and we'd be interested in your thoughts.

I also want to mention that we're coming up with some exciting innovations. We're developing a Transmission Availability Database to help developers with their project planning. The database will have a Google map-like capability to signal to developers and communities what transmission capacity is going to be available, where and when.

I am confident that the combination of certainty through our long-term contracts, significantly more detailed information on transmission capacity going forward and much enhanced coordination of approvals from end-to-end will all send a very powerful and positive message to developers, manufacturers, investors and lenders.

So as I said at the outset, there is a lot happening in the electricity sector to be excited about. And we at the Power Authority haven't forgotten about our "other day job," which includes procuring needed natural gas plants, nuclear supply, combined heat and power facilities, and other initiatives such as addressing the Clean Energy Standard Offer Program, non-utility generators, early movers, etc. There are a lot of exciting developments going on in the province right now. I liken it to the effect of the cell phone on the phone system in terms of magnitude of change. The electricity system here really has not changed much in the last 100 years or so, but in the next five to 10 years it is going to dramatically change.

For the Power Authority, it means a major role as facilitator of this transformation – and many new partners to collaborate with.

Inevitably, it means higher electricity prices for consumers. But it also means there will be new tools for them to manage their electricity use and reduce their costs. When you look at us compared to Europe, on the residential side, our electricity prices are about a third of what the prices are there and they have made more progress on conservation on a number of fronts. We are looking to provide customers with more tools. Going forward also holds new opportunities to generate revenues through demand response programs and by generating electricity under the FIT Program.

For the energy sector, the Green Energy Act means the greening of the electricity system through increased conservation and renewable energy resources. It means a major transformation in the way we plan, generate, transmit, distribute and use electricity.

For the environment, it means lower emissions of greenhouse gases and other harmful pollutants.

And for Ontario's economy, it means opportunities for new jobs, new businesses and even new local industries.

Thank you. I'd be happy to take your questions now.