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**To the
Durham Strategic Energy Alliance**

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Ajax, Ontario**

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NOTES FOR REMARKS

Good morning. It's a pleasure to be here today.

In 2012, some of you may have heard presentations from two of my colleagues.

Our CEO, Tom Mitchell spoke to the DSEA last April about OPG's vision for the future, including the future of the nuclear stations here in Durham, which, by the way, produced about 33 per cent of Ontario's power last year.

Later in the year, Albert Sweetnam, Executive Vice President – Nuclear Projects, gave an update on some of our major infrastructure projects – with an emphasis on OPG's nuclear projects.

This morning I'd like to build on what Tom and Albert presented, with an emphasis on our hydroelectric and thermal projects and partnerships.

I also want to highlight some of the recent work we've done to redevelop and strengthen our project management capability at OPG.

While it may not seem so at first, OPG's Hydro-Thermal business has much in common with our nuclear operations. Our nuclear plants and projects are helping to make Durham an energy leader – a goal the DSEA is very much committed to. Likewise, our Hydro-Thermal operations and projects are helping to make energy an important economic driver in other parts of Ontario – especially in the north. What's more, many of the learnings we acquire in Hydro-Thermal can be applied to our nuclear operations and vice versa. Ontario, as a whole, profits.

In fact, when it comes to new generation initiatives I have not seen in decades as much generation being planned or built as I'm seeing now. And I've been with the company for almost 40 years. In some cases these are large projects. Others are smaller initiatives designed to meet a specific, local need -- as is the case in some northern parts of the province.

The scale and variety of our projects is amazing. And every one of them – every one -- is going to bring major benefits to Ontario. That means:

- ...**economic benefits** for the communities where these projects are located...
- ...**business and competitive benefits** for the many partners and contractors who work with us on these projects...and
- ...**environmental and cost benefits** – because these projects will all be producing reliable, low-emission electricity.

These projects will also **help modernize Ontario’s electricity infrastructure** – resulting in state-of-the-art facilities to ensure safe, reliable power for decades to come.

To give you a better idea of what I mean, here are some of the projects we have underway – starting with our major ones.

Large Hydroelectric

On the hydroelectric side of the business, we have two huge projects.

One is the **Niagara Tunnel** – It stretches 10.2 kilometres under the city of Niagara Falls, and at the peak of the project work, employed nearly 600 workers. The tunnel itself is high enough to hold a four-story building and 1.5 times wider than the Euro-Tunnel under the English Channel. When complete, it will last 100 years or more -- and provide on average enough clean water to power 160,000 homes a year.

To call this \$1.6 billion project an “engineering marvel” is no exaggeration. It’s an amazing piece of technology that serves a great purpose. And it’s made in Ontario, for Ontario, and owned by the people of Ontario. It’s an asset we all can be proud of.

Right now, we’ve finished about 93 per cent of the work. We completed the concrete lining in November and expect the Tunnel to be in service this spring. It’s tracking ahead of its revised schedule and budget.

Our other big hydro project is the **Lower Mattagami** redevelopment in northeast Ontario. This is a \$2.6 billion, 438 MW project -- the largest hydroelectric undertaking in northern Ontario in 40 years. The project involves work on four existing hydro stations – and employs 1600 individuals, including over 200 from First Nation and Métis communities.

Photos give you some idea of how massive this project is. But they really don’t do it justice. You have to be there to get the full effect. I’ve been at the site several times. And let me tell you, it’s awesome.

But it’s not just the size. The project is impressive for the model of strong partnership that made it possible. A partnership consisting of OPG, the Moose Cree First Nation, and our major contractors -- Kiewit Alerie Partnership (KAP) and Hatch Energy.

What’s more, when it’s complete it will add substantially to Ontario’s supply of clean, renewable, low-cost power.

Just like the Tunnel, it's providing a real service -- and a real value -- to Ontario.

Also like the Tunnel, work is progressing well at the site. In fact we're ahead of schedule at two of these stations and expect the entire project to be in service in 2015.

Thermal

The other big project I'm responsible for is the biomass conversion of OPG's Atikokan station. Atikokan stopped burning coal in September, and we're investing \$170 million to retool the plant to burn biomass.

When conversion is complete in 2014, Atikokan will be the largest capacity 100 per cent biomass-fueled power plant in North America.

It will have an installed capacity of more than 200 MW and provide Ontario with renewable electricity from a sustainable fuel of biomass wood-pellets.

It will also create about 200 construction jobs for the local economy. Another 150 jobs -- or more -- will come from supplying the wood pellets to the station.

As with our hydro projects, this project is adding significant value to Ontario's economy.

Nuclear

Meanwhile here in Durham, a number of major nuclear projects are being planned.

One is the Darlington refurbishment.

Another is the work to ensure safe, reliable continued operation of the Pickering station until 2020. (We're doing this because Pickering is important. It met about 14 per cent of Ontario's electricity needs in 2012. And electricity from Pickering will be crucial as Darlington units go off-line for refurbishment.)

A third nuclear project is the potential construction of two new nuclear units at the Darlington site.

I won't go into detail about these projects, since I know Albert spoke extensively about them when he was here in September.

But I will say this.

Our nuclear projects, and all of OPG's major projects, are going to dramatically benefit this province.

Like our hydro operations, the nuclear plant operations are a carbon-free, clean-air contributor to Ontario's electricity mix.

They represent billions of dollars in investment... They'll help create growth for communities... and they'll generate jobs for thousands of workers...

Not only that. They are also incubators of innovation – giving hundreds and hundreds of suppliers and contractors the opportunity to be a part of some of the most exciting, leading-edge activities I know of.

Smaller Hydro Projects

The same goes for our smaller projects.

Since the early 1990s we have invested about \$2 billion on sustainment, safety and performance improvement projects at many of our hydroelectric facilities. Of that \$2 billion, \$280 million has been spent on turbine runner upgrades. This has added 465 MW of low cost capacity and 0.9 TWh of energy per year (on average).

In addition, upgrades have been made to some of our Thermal plant turbines achieving an increased capacity of about 15 to 30 MW each.

Currently, we have more than 200 projects underway helping us enhance safety, improve performance and extend the longevity of our stations.

One example is the recently completed Matabitchuan GS penstock and intake dam rehabilitation. This hydroelectric station was built in 1909 on the Montreal River and is part of our Northeast Plant Group. The intake dam/penstock was original and after over 100 years of service required extensive rehabilitation.

The \$24-million project was completed safely, on budget and within schedule and has prepared the station for another 100 years of operation.

159 workers were hired for the project – all but 18 were from Northeast Ontario and \$11 million of material and services were sourced from Northeast Ontario.

The partnership we formed with our on-site contractor, Barclay Construction Group, contributed to the ultimate success of this project.

We also have other smaller-scale projects on-the-go. They include:

- The runner replacement program at our Des Joachims station on the Ottawa River;
- The refurbishment of one of the units at our Beck 1 station in Niagara; and
- The concrete dam rehabilitation at our Chats Falls station, also on the Ottawa River.

Every year, we execute hundreds of initiatives like these, on time and on budget, without fanfare.

And each of these initiatives delivers the same benefits as our larger ones – albeit on a more modest scale.

They bring investment into the local economy. They use the services of contractors and suppliers. They help strengthen Ontario’s electricity capability.

The other thing about our initiatives -- large and small – is that they do not exist in isolation. The lessons we learn in managing one project are applied to others. Many of our nuclear people, for example, have visited the Lower Mattagami site and have come away with new ideas relevant to our nuclear plants and projects. And one of our Darlington managers recently took a benchmarking tour of the Atikokan biomass project.

All of this is giving OPG a huge amount of project management expertise—which we share with our partners and contractors just as they share their expertise with us.

We get better. They get better. It’s a win-win.

And together we are building a project management capacity Ontario can export to other projects and even beyond our borders.

Project Management – Planning

In mentioning project management, I must admit that 10 years ago OPG was far from perfect in this area – especially with respect to large projects.

We made mistakes. But we learned from those mistakes, and we built on those learnings.

As a result, project management is now one of our key strengths.

We are especially aware of the importance of planning.

Here are some of the things we take into account when we plan a project:

- Accurately defining project scope – to know how much work needs to be done.
- Lining up the financing well in advance.
- Benchmarking against best practices – to learn from the experience of others.
- Producing detailed schedules with precise targets.
- Defining accountabilities for everyone involved.
- Developing contingency plans to address any challenges; and
- Establishing third party oversight – so that we’re accountable for our commitments.

Project Partnerships

The other thing we have learned about projects is the importance of partnerships.

We can’t do our projects alone. We need and value partnerships.

This includes community partnerships as well as professional partnerships with contractors and suppliers.

For community partnerships, we've learned how important it is to earn the trust of the community we're operating in.

That's why when we undertake a major project, one of the first things we do is develop and execute a comprehensive community consultation program.

We talk to the community. We build relationships with its members. We consult with them. And, if we already have a local presence, we work to strengthen it.

We do this because we know that if we don't have support from our host communities -- then we are not going to be successful.

And let me say that we have received tremendous support from Durham -- most recently at last year's Darlington Nuclear licensing and environmental assessment regulatory safety hearings. This was an excellent example of community partnership in action.

We have also been fortunate to have this type of support in some of the communities where we have a hydroelectric presence.

Our work with First Nations and Métis communities in establishing a partnership model has proven to be critical to the success of our hydro projects.

It's based on mutual trust and respect, the recognition of past grievances and equity participation. And it's proved critical to the success of our hydro projects across Ontario.

At Lower Mattagami, as mentioned, we forged an effective, working relationship with the Moose Cree First Nation -- without which the project would not have been able to proceed.

We worked closely with the Chief and council from the very first stages of approvals. In fact, the Chief actively helped us in obtaining the approvals we needed to proceed.

We also worked out a reconciliation process that addressed the past impacts of hydroelectric development on Moose Cree traditional land. This included a signed agreement with the Moose Cree that provides the First Nation with a right to purchase up to a 25 per cent equity interest in the project.

Partnerships like this help establish a foundation for future hydro developments. They do it by providing the economic platform on which the Moose Cree and other First Nations and Métis communities can build their own futures.

But that's just half the story.

When it comes to partnerships, it's also imperative that we establish effective relationships with our contractors and suppliers.

Unlike our predecessor, Ontario Hydro, we are strictly an operating company. We don't build projects ourselves.

So for us to execute these initiatives successfully we need to bring in the right people who have expertise in specific areas that we don't.

The Niagara Tunnel, for instance, has dozens of suppliers – in everything from design engineering...to excavation... to cement supply and delivery.

At the Lower Mattagami we have more than 75 material suppliers, and subcontractors are working alongside staff from OPG's engineering, environment and supply chain groups to ensure we achieve project success. This is in addition to our principal project partners – KAP and Hatch Energy,

The same goes for our other projects.

Atikokan....Chats Falls....Des Joachims....Matabitchuan...Beck 1....and our major nuclear initiatives here in Durham....All depend on partnerships for their success. This includes community partnerships as well as professional partnerships.

As I said, these are “win-win” relationships.

We benefit -- because with the right partners we know our projects will succeed. I'm talking about partners who share our values, believe in Ontario, are committed to safety, and understand the importance doing a job well, on time and on budget. Some of them are here today.

By the same token, our partners also benefit. With our resources, expertise and commitment we can contribute to the growth of their communities...provide opportunities for their businesses...help attract investment...and help improve people's lives.

The more we can produce these outcomes, the better.

We're doing it in Northern Ontario.

We're doing it in Niagara.

We're doing it here in Durham

And we're doing it throughout Ontario.

We're building a better, cleaner and more prosperous province for ourselves and those who come after us.

Conclusion

As I said, I've been with Ontario Hydro and OPG for almost 40 years.

I've seen a lot.

I was around when Pickering B came on line....and when Darlington was being built. I was present when OPG was created. And I managed a thermal plant during the great blackout of 2003.

Those were exciting times.

But I tell you, there has never been a more exciting time for me than now.

The projects we're doing come along once in a generation – if that.

They're providing an opportunity to do something really important....To do something that matters.....To make a difference for Ontario's future.

I'm looking forward to having a part of that...and so is OPG.

And we're looking forward as well to having many others – including many of you -- join us on the journey. Thank you.