

# **Tom Mitchell**

**President and CEO  
Ontario Power Generation**

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**Remarks  
to the  
Clarington Board of Trade**

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**April 25, 2013  
Bowmanville, Ontario**

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**BUILDING THE FUTURE TOGETHER:  
OPG AND THE CLARINGTON COMMUNITY**

Thank you Ron. [**Robinson, incoming CBOT President**]

Good evening everyone.

It's great to be here among so many of our good friends and supporters.

You know whenever I come to Clarington I'm always struck by the spirit of partnership here.

I see people working together to create something that's important...and lasting...and valuable.

And it makes me feel good. It makes me feel proud.

Because this is what community is all about.

It's what the Clarington Board of Trade (CBOT) is all about.

For 15 years, this organization has been bringing people and businesses together to help build a truly great community.

OPG is excited and honoured to be part of this endeavour. Several of our employees have served on the CBOT, including Jennifer Knox, Vanessa Hughes and Don Terry.

We look forward to being involved in this organization for many years to come.

Today I want to talk to you about a project that many of you are familiar with.

It's our Darlington refurbishment initiative.

I want to focus on this because I believe Darlington's refurbishment is more than just an energy project.

I see it as an expression of OPG's commitment.

Commitment to Ontario.

Commitment to Durham and to Clarington.

And importantly – commitment to the principles of safety, planning and community which **must** be present in any large scale project today to ensure its success.

I believe the Darlington refurbishment meets these criteria.

What's more, I believe it's going to help advance the long-term growth and fortunes of this community in a significant way – well into this century.

We're excited about this project at OPG.

It's going to be one of the largest nuclear projects of its kind in the world.

It's a 15-year mega-project...

- involving 30 million hours of field work alone...
- employing thousands of highly skilled people at its peak...and
- requiring complex supply chains, massive quantities of equipment and a great deal of new physical infrastructure.

A project this big creates many opportunities – not just for OPG but for the community. And I'll be talking about some of these later.

We also have confidence in this project.

OPG has been preparing for refurbishment since 2007.

We're doing this because we want to be certain we succeed.

In fact, we're building as much certainty into this project as is humanly possible.

For three years – **three years** – we did extensive studies and tests to determine if Darlington was a fit candidate for refurbishment...

...and likewise to determine if refurbishment was a good investment for us and the Province.

That was in 2010 – when we announced we were entering the project's planning phase, with an emphasis on detailed planning and preparation. This is the phase we're in now.

It may seem like we're taking a long time to prepare.

But as Abe Lincoln used to say: "Give me six hours to chop down a tree, and I'll spend **the first four** sharpening the axe."

Lincoln knew the value of preparation...and so do we.

I want to stress that even though we're confident about refurbishment, we remained objective.

We were ready to stop it if the business case wasn't there.

We did it with Pickering. And we would have done it with Darlington.

But Darlington is different.

It's a younger plant.

It has newer technology compared to any refurbished Canadian nuclear plant to date.

It's also one of the best performing nuclear stations in the world.

- Its reactors are consistently named among the world's top performing CANDU units.
- It has an exceptional safety record – having reached last year over 12 million hours worked without a lost time injury.
- And it's been internationally recognized for outstanding improvement and performance.

In short, **Darlington is a Cadillac among nuclear generating stations.**

This makes it a very strong candidate for refurbishment.

By the way, I borrowed the idea of comparing Darlington to a quality car from Mark Arnone.

Mark is our VP of Refurbishment Execution.

He's sitting over there with Dietmar Reiner, our Senior VP of Nuclear Refurbishment.

Mark, Dietmar and their team are a big reason why I'm confident about refurbishment – and why you should be too.

They have a huge amount of experience in project management.

They are excellent leaders.

And they are leaving no stone unturned in their commitment to make this undertaking a success.

There are other reasons to be confident as well.

Since 2010, we've been making strong progress as we moved deeper into the planning process.

- We've done additional technical studies, inspections and engineering work on the plant to further increase our assurance and certainty.
- We have put in place the project's organization, systems, governance and oversight.
- We are also working to establish regulatory certainty; refine and finalize the project's scope; identify and implement major contracts; train staff; manage supply chains and procure material.

On the contracting side, we have already established two major contracts worth nearly one billion dollars.

- One is for the huge job of removing and replacing the calandria and feeder tubes on all four of Darlington's reactors.
- The other contract is to refurbish the plant's turbine generators.

In the key area of infrastructure, we launched and substantially completed construction of the Darlington Energy Complex – one of the cornerstones of the project’s success.

All major training for the project will take place at this facility – using state of the art equipment and tooling – including an exact replica of a reactor.

This will be **the first major nuclear refurbishment project ever to deploy a full scale mock-up reactor.**

Early in our planning, we did a lot of benchmarking and best practice research.

And everyone we asked said the same thing. “Build a mock-up to train people on before they even go near the real thing.”

That’s exactly what we did – which is important...That’s because real reactors are radioactive environments. They are not the best places to “learn as you go.”

Having a mock-up reactor eliminates that issue.

It allows us to train people, test tooling and perfect our techniques – all in advance – thereby helping to ensure success once we “go live” on a real reactor.

In addition to the mock-up, we also submitted an Integrated Safety Review and an Environmental Impact Statement in 2011.

With respect to the latter, we underwent public hearings last December...and last month received from our regulator, the CNSC, its decision.

The CNSC said that refurbishment would not likely cause significant adverse environmental effects, given the mitigation measures identified.

That was very good news.

We still have a number of other steps to go in the licensing process.

But achieving this regulatory milestone paves the way for us to move ahead on a number of additional refurbishment activities.

But the biggest source of certainty I have in this project comes from our people.

I mentioned our leadership team of Mark and Dietmar.

But there are so many others.

We have employees with broad experience successfully managing and executing large scale nuclear projects. These projects include:

- two huge vacuum building outages at Darlington and Pickering respectively;
- the safe storage of two reactors at the former Pickering A station – a \$360 million project;
- a major fuel channel and maintenance project at the former Pickering B station; and
- a 3,600-task maintenance outage at our Tritium Removal Facility.

Our people have also studied nuclear refurbishments at Bruce Power and in South Korea.

We've learned valuable lessons from these projects which we're applying to Darlington.

This includes hydroelectric projects too – like our massive \$2.6 billion Lower Mattagami project in northern Ontario.

Some of our people are now so adept in managing complex projects that we seconded them to help others.

We recently had a team assisting in the Point Lepreau nuclear refurbishment in New Brunswick. They're still there, providing support and advice during the station's early start-up period.

All this experience is giving us an increasingly high degree of certainty that we're on the right track.

Going forward, we plan to do even more – as we approach execution phase, starting in 2016.

We will complete the process of signing major contractors. (There are five key contracts to go – in addition to the two we have already signed.)

We will take possession of the Darlington Energy Complex once it's fully completed this June and begin equipping and staffing it.

And importantly, we will continue to develop and refine a number of studies, assessments and activities that will add further assurance to the success of refurbishment.

This includes:

- determining the regulatory and technical scope, the engineering, material procurement, and the hiring and training of trades staff.

It also includes:

- the building of additional infrastructure – such as water and sewage facilities, parking and a heavy water storage plant.

Once these are finalized, then – and only then – will we be in a position to develop and release a final, exact cost-and-schedule estimate for the entire project.

We will have that estimate ready in 2015.

After that, as I said, the construction phase gets underway starting in 2016.

I also want to briefly say something about new nuclear.

As you know, Darlington was selected a while ago as the site for two new nuclear units.

The decision to go forward with these units is pending with the Ontario government.

We haven't been standing still, however.

We've completed all the regulatory work and the site is ready to go as soon as we get the green light.

The big question is...when and if.

OPG wants to see these units built. Many of you may feel the same way.

If you do, talk to your friends and colleagues. Work your networks, and make your views known.

But let me get back to refurbishment because there's one more thing I want to cover off.

And that's the opportunities and benefits refurbishment will bring to Ontario, Durham and to Clarington.

The broad benefits are substantial.

Refurbishment will allow Darlington to operate for another 30 years.

That's 30 more years of producing over 3500 MW of low-cost power for Ontario...

...30 more years of providing roughly 18-20 per cent of all the energy consumed in Ontario...

...30 more years of producing energy that's virtually free of emissions contributing to smog and climate change.

Those are some of the advantages refurbishment brings to Ontarians at large.

But it will also benefit Durham and **this** community – as will the proposed new nuclear units.

One area is contracting.

We are currently determining the major contractors for refurbishment and have already selected several. They include firms like:

- McKay-Cocker Construction,
- Black & MacDonald,
- Alstom Power and Transport Canada,
- ES Fox, and
- CANDU Energy.

Hundreds of sub-contractors, suppliers and consultants will also be needed. This includes local and regional firms.

Of the firms involved in building the Darlington Energy Complex, eight were from Durham, representing 15 per cent of the project's workforce.

Last year, OPG joined the CBOT in organizing the 4<sup>th</sup> Annual Clarington Energy Summit. We updated local businesses and supply chain companies on refurbishment. Afterwards, they got a chance to meet with OPG and some of our contract vendors one on one.

It was a sold-out event with about 100 people attending. About half were from Durham and about 18 per cent of those were from Clarington.

We're committed to working with Clarington to inform the community about the opportunities refurbishment offers.

- opportunities in areas such as commercial, residential and warehousing space;
- opportunities in real estate, food and catering, cleaning services, and retail;
- and opportunities in the technical, professional and skilled trades.

We estimate we'll need a workforce of about 2500 to execute the project.

That's double Darlington's current workforce.

We're talking everything from project management professionals and engineers...to boilermakers, millwrights and gasfitters...to carpenters, electricians and plumbers.

And that's not counting the thousands of additional indirect jobs the project will generate.

We expect the majority of these workers to be resourced from across Durham and the GTA – including Clarington.

We also expect refurbishment to create exciting spin-off opportunities.

The Darlington Energy Complex, for example, is a major tenant in the Clarington Energy Park.

Its presence can act as a catalyst, attracting to the Park leading edge businesses committed to developing new energy and environmental technologies.

This would be a major contribution to Clarington's growing reputation as an energy "centre of excellence."

Another benefit is community commitment.

We're not selecting contractors and suppliers only for their technical and professional skills.

We also expect them to give back to the community – as we do at OPG.

Our reasoning is simple.

Since many of these companies are going to be working in the area for an extended period of time, it makes sense that they become engaged and involved members.

We encourage them to do that.

Our goal is to create a cluster of suppliers – through our contracts and partnerships – who are committed to Durham and Clarington and willing to demonstrate that commitment as good corporate citizens.

I say this as someone who knows from experience that Clarington is a great place to live, work and locate.

And I want more people and businesses to know that.

You have been a tremendous host community for OPG.

Your support for the Darlington station, for refurbishment and for new nuclear has been consistent, committed and strong.

You have been there for us...and we intend to work with you to help this community fully participate in, and contribute to, Darlington's refurbishment.

For our part, OPG is committed to delivering this project safely, on time and on budget.

We are going to do it right – through meticulous planning, learning from our own experiences and those of others, and relying on the best people.

This includes not only our own talented employees but the thousands of highly skilled and trained employees in Ontario, Durham and in this community.

And speaking of good people, let me say one more thing.

We feel very fortunate at OPG to have the support of some superb people here.

People like the CBOT's tireless executive director Sheila Hall...

...People like Clarington Mayor, Adrian Foster...

...and so many other community leaders like yourselves.

You are a tremendous asset to your community and tremendous asset to OPG.

The amount of economic activity underway in Clarington and the number of businesses locating here – in addition to our refurbishment – is indeed impressive.

And that's a credit to many of the people in the room.

In closing, I want to repeat something Mayor Foster said in his address last September to the CBOT.

He was outlining Clarington's many economic strengths. And he said this about your community.

He said "no one is going to beat our drum for us. We have to do it ourselves."

Well Adrian, I'm here to say that there's one drummer in the band that you can always count on – along with everyone else in this room.

And that's OPG.

We know what a great place Clarington is. We want to work with you to make it even better.

And we want to make sure others know about it. Together we can make it happen.

Thank you.