

# **Standing Committee on Natural Resources**

Wednesday, October 4, 2017

#### • (1610)

## [English]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): Let's get under way.

We apologize for the delay, but we had a vote in the House. It looks like we'll be having more votes shortly, so this might be an abbreviated meeting.

We have two witnesses for this hour, and we have another witness for the second hour. We'll hear from these two first. By then we should be able to connect with the third witness by video conference. After we hear from them, we can take questions.

To our witnesses, first of all, thank you for attending, and thank you for your patience. We will give each group up to 10 minutes for their presentations. When all the presentations are done, we'll open the floor to questions, if we have time. You will be asked questions in French and English. There are headsets available for you for translation purposes.

For our first two witnesses, we have Mr. Sackville from the Ontario Society of Professional Engineers and Jocelyn Bamford from the Coalition of Concerned Manufacturers and Businesses of Ontario.

Welcome to you both.

Mr. Sackville, I see you have two colleagues with you.

Mr. Patrick Sackville (Lead, Policy and Government Relations, Ontario Society of Professional Engineers): Yes. There's an update to our roster.

The Chair: Okay. I'll leave the introductions to you.

I open the floor to you for the first 10 minutes.

Mr. Patrick Sackville: Certainly.

Go ahead.

Dr. Handan Tezel (Professor, Chemical and Biological Engineering, Faculty of Engineering, University of Ottawa, Energy Task Force Member, Ontario Society of Professional Engineers): Good afternoon.

Mr. Chair and members of the committee, thank you for inviting the Ontario Society of Professional Engineers, or OSPE, to provide expert input on behalf of Ontario's engineers regarding Canada's electricity interties. My name is Handan Tezel. I'm a professor in the department of chemical and biological engineering at the University of Ottawa. Today I'm joined by OSPE's past president and chair, Paul Acchione, as well as by OSPE's policy and government relations lead, Patrick Sackville.

Mr. Acchione and I are members of OSPE's energy task force, which is a group of 12 seasoned professional engineers who are energy experts in their respective fields. We are pleased to be here today to speak on behalf of our esteemed organization and membership.

OSPE is the voice of the engineering profession in Ontario, representing more than 80,000 professional engineers and 250,000 engineering graduates, interns, and students. OSPE advocates on important public policy issues that affect engineers and society. One of those issues is energy, and within that electricity, as well as environmental protection and the existential threat that is climate change.

From the outset, OSPE must stress the importance of ensuring a comprehensive justification for the development of electricity interties, with particular attention to the electricity market reforms being implemented across North America. The electricity markets in North America are evolving toward a design that includes separate markets for energy, capacity, ancillary services, transmission, and distribution. This design progression will have profound impacts on the jurisdiction for intertie and generation capacity investments, as my colleague will now explain.

#### Mr. Paul Acchione (Past President and Chair, Energy Task Force Member, Ontario Society of Professional Engineers): Thanks, Dr. Tezel.

Members of the committee, the present global initiative to reduce carbon emissions for our energy needs is driving jurisdictions to invest heavily in renewable energy technologies, especially in the electrical sector. Focusing on the North American experience, the introduction of renewable energy in the electricity sector is causing two profound changes to electricity markets.

The first profound change is that wholesale electricity prices are in a state of decline and are approaching a cost of zero. There are a couple of reasons for this decline. One is that renewable energy facilities have a marginal cost—primarily of fuel—of energy production that is close to zero. Another reason is that the wholesale electricity markets are designed to price energy at its marginal cost of production. Consequently, as jurisdictions reduce carbon emissions in their power grids, the average wholesale price for electrical energy will continue to fall and approach zero. In 2016 the average price of energy on the wholesale market in Ontario was about  $1.6\phi$  per kilowatt hour, approximately one-tenth the retail price. The reduction in Ontario's wholesale market price for electrical energy was the result of the province's successful program to reduce carbon emissions in its power system. As evidence of this, Ontario has already achieved an 80% reduction in carbon emissions compared to 1990 in its electrical sector.

The low wholesale market energy price is causing electricity market design authorities to make a second profound change—that, moving forward, generation capacity will likely be paid for in a separate capacity market. I appreciate that this may sound complicated, so let's unpack it a bit.

The capacity markets, as they currently exist in the United States, are dominated by natural gas-fired generation. Natural gas-fired generation is not low emission. The low emission hydroelectric and nuclear generation capacity, needed to mathematically achieve emission reductions of 80% or greater, are dominant in Ontario. The problem is that Ontario's hydroelectric and nuclear generation capacity market with natural gas-fired generation unless the carbon price is much higher than currently envisioned by either the Canadian or Ontario government.

What does this mean for Ontario and Canada? As long as American jurisdictions burn natural gas to make electricity and the price of carbon remains low, Ontario's exported zero-emission electricity will be able to recover only a fraction of its total production cost. As the various neighbouring jurisdictions' power grids become cleaner, the fraction of total production costs recovered by exports will decrease as their wholesale market prices also approach zero. The burden to pay for the unrecovered cost of installed capacity will fall on the residents of the exporting province.

So what can we do about it? Canada must recognize the impact of these changes—I'm talking about market changes to the North American electricity markets—and ensure a thorough analysis of the winners and losers before approving any investments in electricity intertie capacity. This analysis must include anticipated changes to the electricity market design during the lifespan of those investments, the exact kind of scenario analysis that professional engineers are most proficient at conducting, and should therefore be utilized to determine best options going forward.

Canada needs to think more broadly about its climate change goals. Reducing emissions across the entire economy requires us to examine and address our thermal energy needs. Canadian residents and businesses use approximately four times more thermal energy to run their homes and businesses than electrical energy. Presently, Canadian jurisdictions have the technology to economically reduce emissions in the electrical sector, because the retail price for dependable, non-interruptible electricity is high enough to pay for the required clean capacity.

• (1615)

Reducing emissions in the thermal energy sector will be much more difficult, because dependable thermal energy is far less expensive than dependable electricity.

Renewable electrical systems produce a significant amount of energy out of phase with electrical demands. Consequently, surplus zero-emission electricity is available at very low energy prices. In 2016 Ontario's surplus zero-emission electricity cost less than one cent per kilowatt hour on the wholesale market, or about one-third the price of natural gas on an energy-equivalent basis for residential customers.

Consequently, if consumers had dual-fuel appliances, such as hot water heaters with smart fuel-switching controllers, surplus zeroemission electricity could be used on an interruptible basis when it was available to reduce natural gas use and carbon emissions at an economical cost.

Additional intertie capacity would then have value, to the extent that it can be used to import low-cost zero-emission electricity from adjoining jurisdictions to reduce fossil fuel use for Canadian buildings, industry, and transportation.

Doctor.

**Dr. Handan Tezel:** Displacing fossil fuels with surplus clean electricity when available is a viable carbon emission reduction strategy until the point at which new technologies become economical. Canada must also invest in the development of electrical and thermal energy storage technologies to drive down the costs, which will help both Ontario and Canada in the long term.

This concludes our prepared remarks. On behalf of my colleagues, I thank you for this opportunity. We welcome your questions.

The Chair: Thank you very much.

We'll move on to the Coalition of Concerned Manufacturers, with Jocelyn Bamford and Shalini Seth.

Ms. Jocelyn Bamford (Founder and Vice-President, Automatic Coating Limited, Coalition of Concerned Manufacturers and Businesses of Ontario): Thank you very much for giving us the opportunity to speak to the committee today.

I represent the Coalition of Concerned Manufacturers, a grassroots group of primarily small to medium-sized businesses that formed last year out of a concern for the business impact on not having competitive energy pricing within the province. I also am the vicepresident of our family company. We employ 86 people in Scarborough, Ontario. We have developed many patents for corrosion coatings. We currently do corrosion coatings for the U.S. Navy. They send parts up to us to coat, we send them back; and they have done that because we hold the patent. We have also developed environmentally friendly ways of stripping plastic and coating existing pipelines that have PCBs or asbestos. We do it all in an environmentally friendly way. We started the coalition a year ago because our energy pricing is not competitive. We are paying three times the energy and electricity pricing than we would in neighbouring states, who have all been trying to attract us to move our businesses down there for years. We've resisted because we're proud Ontarians and proud Canadians, but right now, with the way energy pricing is going, we're at a tipping point.

As for how the coalition came together, I had attended a conference on cap and trade, and I became quite concerned about the impact of cap and trade on our competitiveness. Immediately I started to do some research. I'm a mother; I have children; I wanted to understand. I wanted to make sure there was a clean environment for them, so I immediately did some research. I found out that in Canada we contribute less than 2% to greenhouse gas emissions, and in fact, we are as carbon neutral as you can get.

I couldn't understand why we were putting our businesses at risk —small to medium-sized businesses are the lifeblood of the Canadian economy—and why we would go down this path of burdening our small to medium-sized businesses with cap and trade, with three times the electricity prices that we would have in another state, given the fact of our global contribution to greenhouse gases.

I have in front of me a proposal from New York state to bring our business to them, and my 16¢ per kilowatt hour, which is in U.S. dollars, would be 6¢ per kilowatt hour. That would save me over \$25,000 a month, and that quickly adds up to pricing the Ontario energy policy right out of the marketplace. It really impacts businesses that are making decisions today on whether they move, whether they move their growth, which Shalini is going to talk about, or whether they close—or whether they have finally had enough. We're seeing companies within the small to medium-sized businesses sell out to large international companies.

So in terms of some of the unintended consequences of our energy policy, we are seeing an economy that may be well controlled not by Canadians but by international companies and outside forces. I think that's not going to be a good phenomenon for Ontario.

We need a direction to energy pricing that understands that businesses are what fund all of our public policy. There seems to be a narrative, first in Ontario, and now federally, that businesses are the bad guys. We're the ones that employ people, that allow people to pay taxes, and allow for policy to move forward. Without us there aren't any of those things.

We need an energy policy that's realistic in respect to our greenhouse gas contribution to the world and realistic in order to keep businesses thriving. We are blessed that we are a nation with natural resources. Instead of adopting a policy that reflects countries that don't have natural resources, we should have a policy that allows us to continue to grow, utilizing our natural resources in a responsible way. You don't throw the baby out with the bathwater. There is lots of new technology and innovation in carbon capture that allows us to both grow our economy and grow our businesses, to have an energy policy and pricing that's competitive with the United States, and also have a green environment.

### • (1620)

We can achieve all of those things. One only needs to look to St Marys Cement. In terms of greenhouse gas contributions, cement companies are very large in the global contribution to greenhouse gases. St Marys Cement, through their technology with Pond Technologies, is going to be one of the first global contributors to a carbon-neutral cement factory. We should celebrate and embrace that, and move that forward.

When I hear Catherine McKenna say that we're going to electrify everything, that concerns me, because I don't believe that there will be companies able to compete globally, and we're not embracing the natural resources that we have been gifted with in this country. We need to focus on areas where our businesses can compete, because I am seeing an alarming rate in Ontario of businesses moving or losing growth.

I'm going to turn it over to Shalini to talk about her company, which is an amazing company with an amazing story.

#### • (1625)

# Ms. Shalini Seth (Secretary, Coalition of Concerned Manufacturers and Businesses of Ontario): Thank you very much.

My name is Shalini. I represent a food-manufacturing business out of Scarborough, Ontario. I'm the third generation to join my family's company. My father came here through the Idi Amin expulsion from Uganda, Africa. We have been manufacturing East Indian snacks and sweets in Toronto for the last 36 years.

The impact of this, with all of the other policies and changing workplace legislation, especially in Ontario, is a direct impact on our growth. We currently employ 120 people. In food and beverage manufacturing, there's a very low margin and, being an East Indian food manufacturer, our direct competition is from India. One would say that we cannot compete on a one-on-one basis, so our R and D and our niche market is where it kicks in. Our products carry the "Made in Canada" name. We are very proud to be able to write that on our products, but that will only take us so far when we are not able to compete on a global scale. Currently, all of our growth and any profits that are made are put back into our business to ensure that we are growing and that we can continue to strive.

Energy pricing plays a big role in this when 65% of our bill is the global adjustment and, on top of that, we're paying 16¢ and 17¢ a kilowatt hour. For a lot of the programs in terms of the subsidies that are given, or the ICI program that was proposed, a lot of small businesses cannot actually apply, or it is a very convoluted process and they can't participate even if they want to. Our company is too small to be part of the ICI program, but we are too big to receive the rebate. We are still continuing to pay astronomical amounts of money for our energy, for our electricity and natural gas; however, we cannot be a part of any of the programs.

What we would ask you is to bring that awareness. That was one of the reasons why our company joined the coalition: to bring that awareness. A lot of small businesses do not have the voice to have a direct impact. There's only so much absorption a company can undertake without it starting to impact their growth. We have grown. We have been blessed that we have been able to grow through the recipes my grandfather and my father have developed. We have our own distribution centres in the U.S. Our export sales have grown by 70% in the last three years, which we are very proud of. However, in order for us to continue that growth and to hire the new immigrants —a lot of the time, the first job for a lot of the people who come to this country is in manufacturing—we need to have a level playing field where we can all work together.

This does not mean, as Jocelyn mentioned, that we do not care for the environment, but there has to be a realistic approach. Effective studies have to be done in order to understand what the impact is going to be all around.

Thank you very much.

The Chair: Thank you.

The bells have started ringing. We're going to have to adjourn, unfortunately.

Mr. Jamie Schmale (Haliburton—Kawartha Lakes—Brock, CPC): Chair, could I make a motion to continue on for maybe one round of questioning, since it doesn't look like we'll get the second...?

**The Chair:** We have one more witness. We haven't even heard all the witnesses yet.

Mr. Jamie Schmale: Oh, we have one more. Okay.

The Chair: Yes.

T.J.

**Mr. T.J. Harvey (Tobique—Mactaquac, Lib.):** Can I make a recommendation that we at least hear the third witness? They have taken time out of their schedule to be with us here today. It will take 10 minutes.

The Chair: We're going to have to postpone that to another day, unfortunately.

**Mr. Jamie Schmale:** Can we ask these witnesses to come back another time?

The Chair: Yes, I think we can get the third witness.

I'm sorry. The bells are going, so we're going to have to adjourn right now.

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