



ISSN 1181-6465

**Legislative Assembly
of Ontario**

First Session, 41st Parliament

**Assemblée législative
de l'Ontario**

Première session, 41^e législature

**Official Report
of Debates
(Hansard)**

Wednesday 28 October 2015

**Journal
des débats
(Hansard)**

Mercredi 28 octobre 2015

**Standing Committee on
Estimates**

Ministry of Energy

**Comité permanent des
budgets des dépenses**

Ministère de l'Énergie

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Toronto ON M7A 1A2
Telephone 416-325-7400; fax 416-325-7430
Published by the Legislative Assembly of Ontario



Service du Journal des débats et d'interprétation
Salle 500, aile ouest, Édifice du Parlement
111, rue Wellesley ouest, Queen's Park
Toronto ON M7A 1A2
Téléphone, 416-325-7400; télécopieur, 416-325-7430
Publié par l'Assemblée législative de l'Ontario

LEGISLATIVE ASSEMBLY OF ONTARIO

ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

STANDING COMMITTEE ON
ESTIMATESCOMITÉ PERMANENT DES
BUDGETS DES DÉPENSES

Wednesday 28 October 2015

Mercredi 28 octobre 2015

The committee met at 1551 in room 151.

MINISTRY OF ENERGY

The Chair (Ms. Cheri DiNovo): Good afternoon. We are here to resume consideration of the estimates of the Ministry of Energy. There is a total of one hour and 27 minutes remaining.

When the committee last adjourned consideration of the 2015-16 Ministry of Energy's estimates on October 21, the third party had the floor with six minutes and 32 seconds remaining in its rotation. Mr. Hatfield, please proceed.

Mr. Percy Hatfield: Thank you, Madam Chair. Good afternoon. Good afternoon, Minister.

Minister, a couple of weeks ago you wrote to the warden of the county of Essex, saying that there will be a 13-kilometre transmission line and new transformer station coming near Leamington, but it won't be there until 2018.

I talked to the mayor of Leamington and the warden of the county. They assured me there's a strong business case, the economics are sound, the demand is there and it will pay for itself in no time at all. They're losing industry to Ohio because they have available energy. They want to know why the delay and what can be done to expedite the project.

Hon. Bob Chiarelli: Welcome to estimates, MPP Hatfield. I certainly appreciate the question. I, my staff, IESO and Hydro One have been on that file working with the community for well over a year now.

The good news is that the greenhouse growers' business is expanding by leaps and bounds. I smile every time I walk into a supermarket, certainly in my community, and see Ontario or Canadian produce. A lot of that is coming from the greenhouse growers. We know that they're marketing to the US and exporting to the US.

The challenge has been for the system to catch up with the infrastructure, to that type of demand. Yes, we've had meetings. At the last AMO conference, Gary McNamara, the mayor of Tecumseh and president of AMO sat down with Premier Wynne, myself and some of our staff. We did an analysis of the challenges. Collectively, we undertook to expedite things as quickly as possible.

You may be aware that on July 16 Hydro One did receive leave to construct the transmission line and transformer work that had to be done. It has been approved.

The issue now is the process moving forward. I know that there has also been some subsequent discussions with myself and Mr. McNamara with the IESO. The IESO has suggested a number of ways to expedite that date. I think there's a strong consensus that we're going to do much better than that 2018 date that you alluded to. That was the original date. Work is under way now to accommodate the urgency of the situation.

I'm going to pass it on to Michael Reid, our ADM, just in a moment, but this is a complex file. I'm very, very willing to arrange, hopefully by the end of next week, for you and any of your caucus members to meet with the IESO and somebody from my office to get a 100% briefing on the status of that particular file.

With that, I'll pass it over to ADM Michael Reid.

Mr. Michael Reid: I'm Michael Reid, assistant deputy minister at the strategic network and agency policy division of the ministry.

As the minister has mentioned, this has been a project that we've been working on for quite some time to help support the load growth in the area. As the minister has mentioned, there's been a lot of thought about ways to accelerate the project.

The one thing that I'd mention, in addition to the comments from the minister—he noted that the leave to construct was issued by the Ontario Energy Board which now allows Hydro One to begin the process of constructing the line and the transformer station. In recognition of the fact that this infrastructure is needed, what the Ontario Energy Board did is—normally, when they would make a leave-to-construct decision, they would be approving the construction of the line, but they would also be figuring out the cost allocation.

I think what the Ontario Energy Board said in this case is that the cost allocation may have been the more interesting hearing that they were going to have to undertake. So they separated out the two and said, "Given the urgency, you can begin constructing the line." Then, they basically broke it up into a two-phase process where the second phase will begin—that second order of figuring out the proper allocation of project costs.

I think in that instance, it was the entire sector working together to move the project forward and allowing Hydro One to actually get into the construction of the infrastructure.

Mr. Percy Hatfield: Thank you. I'm not sure how much time I have left, Madam Chair.

The Chair (Ms. Cheri DiNovo): About a minute and a bit.

Mr. Percy Hatfield: A minute? I don't know if I can even ask my next question in a minute. I'll try.

From the Hydro One prospectus, we see a bunch of closing transactions: the \$2.6-billion departure taxes paid, \$2.6 billion in share equity is issued to the government, there's the transfer of Hydro One Brampton to the government and there are recapitalization transactions. After all these transactions are completed, we see that Hydro One's book equity increases from \$7.913 billion to \$9.386 billion. Last year, the OEB allowed Hydro One to claim a return on equity of 9.3%, but after these closing transactions Hydro One's equity will increase by almost 20%. Does this mean Hydro One's OEB-regulated profits will also rise in order to maintain a similar rate of return on equity?

Hon. Bob Chiarelli: It doesn't leave a lot of time to answer. We're going to have time to come back to you again and we can hold that question for the next round. You might even have to repeat it because some of us are getting a little bit—

Mr. Percy Hatfield: That will eat up all my next round's time.

Hon. Bob Chiarelli: It's a very, very complex issue. I will say that a lot of the issues or the facts that you referred to in your question were the subject of very, very detailed discussion with your colleague, MPP Peter Tabuns. We did go through a lot of that, but we're happy to take another run at it—

The Chair (Ms. Cheri DiNovo): Thank you. I'm sorry. Time is up for the third party. We will move on to the government side, Ms. Kiwala.

Ms. Sophie Kiwala: Minister, the members from the PC Party have been quite critical of electricity exports throughout the committee process, and we've heard numerous questions about this subject in question period as well. As a new member, I find the process quite fascinating, and I'm wondering, just for further clarification, if you could let us know what the rationale behind electricity exports is and what the PC stance was on this when they were in government.

Hon. Bob Chiarelli: Thank you, MPP Kiwala. There are some complexities to the issue. I know that the member from Renfrew–Nipissing–Pembroke has raised that issue on a number of occasions in the Legislature. He's raised them here in estimates. I was hoping that he would be here today to receive the clarification, but since this might be the last day of estimates, we'll go ahead—

Mr. Todd Smith: He'll be here later.

Hon. Bob Chiarelli: —and we won't have to listen to his soliloquy premise to his questions today, but they're always very entertaining.

I'll just go through briefly to try to fill in the answers to the question. First of all, the electricity system is planned to meet peak demand which can, from time to time, lead to excess supply during unexpectedly low-demand periods. In other words, if it's not peak period, there is capacity that is not being used in the system.

We've got the infrastructure for it and we've got the triggers to ramp up, but if there is not peak demand, then opportunities present themselves.

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During these times, Ontario exports to our neighbours when we have available power, and we are also able to rely on imports of power from our neighbours when it's cost-effective for us to do so. Exports reflect the prevailing market price and are scheduled when it's economic for Ontario. The IESO estimates that the benefit to Ontario from electricity trading in 2014 was approximately \$320 million. Ontario does not build additional capacity to export; we build capacity to meet Ontario's needs and sometimes, in the operation of the system, there's the opportunity to export that power.

Exporting electricity is good for Ontario, both financially and for system operability. All interconnected electricity markets export and import electricity, including our neighbouring jurisdictions. Across North America, there's a collection of connected "cells," I call them, in the sense of a collection of operating systems. They're governed by law, in terms of co-operating, importing and exporting electricity, and helping each other with reliability.

In our system, we're connected to Manitoba, Michigan, New York state, New England, Quebec and I think there might be one other one in there. We're bound by agreement and by legislation to co-operate with each other, to buy and sell electricity and we're required, actually, to export in cases of emergencies in our adjoining jurisdictions.

Electricity trading provides additional grid reliability and is consistent with our goal of providing a clean, reliable and affordable electricity system for all Ontarians. Electricity exports bring revenue to Ontario that we would not otherwise receive. In other words, we're using unused capacity. That reduces costs for Ontario consumers, which should be pretty plain. Any export revenue is beneficial to Ontario electricity consumers by helping to keep costs down.

Electricity exports bring revenue to Ontario that we would not otherwise receive, which reduces costs for Ontario consumers. As a matter of fact, the member for Simcoe–Grey, the former PC energy minister, said the following, back when he was the Minister of Energy—this is in direct response to the member for Renfrew–Nipissing–Pembroke when he asked a question. It had to do with whether there's a profit being made or not, or how you would characterize those exports.

This is what the Progressive Conservative member for Simcoe–Grey said, when he was the Minister of Energy: "Any power we sell to the US, to Quebec, to Manitoba, or power they sell us, is surplus power. It's opportunity power. It's pure profit, in terms that it's power that otherwise would go to waste or not be generated." He also said: "If we can make money on surplus power in the United States, we're damn well going to do that."

I was hoping that the member from Renfrew–Nipissing–Pembroke would be here today, because that's

the question. He was casting some doubt on whether it's profitable for Ontario to export that again. I want to read that quote once more: "Any power we sell to the US, to Quebec, to Manitoba, or power they sell us, is surplus power. It's opportunity power. It's pure profit, in terms that it's power that otherwise would go to waste or not be generated."

With that, I'll wind up my answer to that particular question, and I think we have time for other questions.

The Chair (Ms. Cheri DiNovo): Yes. Mr. Ballard?

Mr. Chris Ballard: Thank you, Minister, for that. It's an interesting issue. I was introduced to—and this isn't my question, but just as a sidebar—an interesting app we have here called Gridwatch that allows us to watch where our power is being manufactured. It's interesting to see right now, for example, that wind power is accountable for about 20% of electricity being produced in the province, which is almost double what we need right now from natural gas. So it's interesting, how you have to balance it all out.

But the question I wanted to talk about was about phasing out coal, and the impact of the Green Energy Act on that. I know, coming from where I live, north of Toronto, sitting on top of the Oak Ridges moraine—we're a few hundred metres higher than Toronto. Starting when I was a teenager, you would look south and see the orange hue over much of southern Ontario. My father would often remark, "Wow, I'm going to be driving into that today to go to work."

As I grew up in that area, that orange hue disappeared, until I realized that it was as far north as Orillia, much of it produced by the burning of coal in Ontario's coal-fired plants, as we were told.

My sense is that phasing out coal generation in Ontario has been one of our government's biggest achievements. I know that critics have said that the phase-out was only achieved with the expanded use of nuclear and natural gas-fired generation sources. I think if we look at today's stats in terms of how much wind is producing, we can disprove that immediately. Some claim that Ontario's investment in renewable energy sources has not contributed to getting the province off coal. There are a few constituents in my riding who ask me whether or not it's true.

So my question to you, Mr. Minister, would be, how have renewable energy projects contributed to the initiative to end coal-fired generation in Ontario, reduce greenhouse gas emissions and meet Ontario's climate change targets?

Hon. Bob Chiarelli: I will answer that, but I do want to make reference to your sidebar as well, and what has happened to the air in Ontario, to the positive.

Going back eight, nine, 10 years ago, I was assistant coach to my daughter's hockey team. Pretty well every year, there were six or seven kids on the team—that many—who had asthma and were using puffers. That has almost been totally eliminated.

The last time I went into a grade 5 class, which I did regularly when I was mayor of Ottawa—they do a unit

on government. I would do my spiel, my presentation, and I would open it up for questions. They're about 11 or 12 years old, the kids in grade 5. The first question I got was about air pollution. Having been in a lot of grade 5 classes and having that experience as a coach, I decided I'd answer the question by asking a question. There were about 19 students in the class, plus the teacher. I said, "How many students in here have asthma and use puffers?" Six put up their hands, and the teacher put up his hand. He was probably between 25 and 30 years of age.

The incidence of childhood asthma has significantly diminished. I know that medical-officer-of-health-declared smog days, or bad air days, in the city of Ottawa have diminished from maybe 10 or 12 a year to virtually none. I don't think there were any in the last year. I think the many more than that that were occurring in Toronto and the GTHA have been very significantly reduced to maybe one or two a year, if even that. The benefit from having helped to clean our air by getting rid of dirty, coal-burning generation is very, very palpable.

I have in my notes here as well—and I've referred to this in question period on a number of occasions—that independent research has shown that there was \$4.4 billion per year in reduced health care and environmental costs over the course of the last four or five years. That is very, very significant.

Yes, Ontario is committed to investing in a clean, modern and reliable electricity system that reduces greenhouse gas emissions and provides cleaner air for this and future generations of Ontarians.

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Ontario's 2013 long-term energy plan includes targets for renewable energy: 10,700 megawatts for wind, solar and bioenergy to be online by 2021 and 9,300 megawatts for hydroelectricity to be online by 2025. In 2003, Ontario had 15 megawatts of wind capacity generated by 10 wind turbines. We now have more than 3,600 megawatts of wind power online—enough electricity to power almost one million homes each year. It's very relevant that if you checked the IESO site right now and found out—for the member from Renfrew–Nipissing–Pembroke—that right now 20% of our power is being generated by wind, right today in Ontario.

Interjection.

Hon. Bob Chiarelli: I'm not asking you to talk. It's my turn to talk.

Interjections.

The Chair (Ms. Cheri DiNovo): It's still the government—

Interjections.

The Chair (Ms. Cheri DiNovo): Mr. Yakabuski. Minister, continue. Thank you.

Hon. Bob Chiarelli: Your soliloquy will come later.

Ontario also has approximately 2,100 megawatts of additional contracted wind capacity that is yet to come online. In 2012, more electricity was generated using wind power than coal for the first time ever. Ontario has made significant progress in reducing greenhouse gas

emissions from the energy sector through actions that include phasing out coal-fired electricity generation and shifting our energy supply to cleaner, non-emitting energy sources. That also includes, incidentally, building significant additional hydroelectric capacity.

As indicated in the 2013 long-term energy plan, emissions from Ontario's electricity sector are expected to remain at historically low levels, largely because of reduced emissions attributable to Ontario phasing out coal-fired electricity generation. Ten years ago, Ontario relied on dirty coal for 25% of its energy and Ontario is now completely coal-free. That's like taking seven million cars off Ontario roads—the single largest climate change initiative in North America. And I've referred to the \$4.4 billion in savings.

Replacing coal with cleaner generation, renewables and conservation will reduce Ontario emissions by up to 30 megatonnes and reduce electricity's carbon footprint by 75%. Ontario has firmly established itself as a North American leader in renewable energy and in clean energy. By 2025, 20,000 megawatts of renewable energy will be online, representing about half of Ontario's installed capacity. That includes not only the renewables of wind and solar, but also clean hydroelectricity and other types of renewable capacity.

As reflected in the 2013 long-term energy plan, Ontario is currently in a strong supply position and will phase in wind, solar and bioenergy over a longer period than contemplated in the 2010 long-term energy plan. Ontario will review targets for wind, solar, bioenergy and hydroelectricity annually as part of the Ontario Energy Report.

The Chair (Ms. Cheri DiNovo): I remind the government that you have about five minutes left.

Hon. Bob Chiarelli: At this time, I'd like to ask Deputy Minister Imbrogno and ADM Kaili Sermat-Harding to add to my comments.

Mr. Serge Imbrogno: Thank you, Minister. I'll just ask Kaili to come up. She can walk you through some of the details related to the coal phase-out—what we've done to replace the megawatts, to make the Ontario system cleaner.

Ms. Kaili Sermat-Harding: Thank you very much. My name is Kaili Sermat-Harding. I'm assistant deputy minister of the Ministry of Energy's conservation and renewable energy division, and I'm happy to provide some additional details regarding the progress that we've been making.

Currently, Ontario has approximately 15,200 megawatts of wind, solar, bioenergy and hydroelectric energy online. In addition to our progress on wind, as outlined by the minister, I'm pleased to provide progress on other renewable technology in the province.

Ontario has more than 1,800 megawatts of solar photovoltaic capacity online; that represents enough electricity to power approximately 215,000 homes each year. And Ontario has contracted approximately 630 megawatts of additional solar PV capacity that will still be coming online.

With respect to hydroelectric capacity, Ontario has approximately 8,870 megawatts of installed capacity with an additional 190 megawatts of capacity under contract and still to come online.

With respect to bioenergy, there are approximately 562 megawatts of bioenergy capacity online and another 24 megawatts under contract and still to come online.

In addition, Ontario's clean energy initiatives have attracted billions of dollars of investments and have contributed to the creation of thousands of jobs across the province.

Perhaps I could turn a little bit to the actual chronology and successes as coal was phased out. Some more numbers: Ten years ago Ontario relied on coal for 25% of its energy needs. Ontario took a phased approach to eliminate coal from our electricity supply mix. By 2012, coal accounted for only 3% of Ontario's total generation. In early 2013, Ontario announced that it would cease coal-fired generation at the Lambton and Nanticoke plants by the end of 2013, one year earlier than planned, and by the end of 2013 coal generation was being surpassed by emissions-free wind generation. In April 2014, Ontario eliminated coal from its supply mix, at which time the Thunder Bay generating station, Ontario's last remaining coal-fired facility, burned its last supply of coal.

As part of the coal phase-out strategy, the government moved forward with conversion of one of the 153 megawatt units at OPG's Thunder Bay generating station to run on advanced biomass, a renewable fuel source. Earlier this year, OPG announced that the conversion of the unit at the Thunder Bay station was successful, and the unit will run on advanced biomass for a five-year term.

Advanced biomass has emerged as a leading candidate for coal plant conversions due to its favourable handling and storage properties. It's a solid biomass fuel, processed with advanced techniques. It has a higher energy density and is hydrophobic—i.e., it repels water—allowing it to withstand the elements while being stored outdoors.

The conversion at Thunder Bay was the first of its kind globally and puts Ontario on the leading edge of the emerging advanced biomass industry. Through this project, OPG has gained valuable knowledge and expertise that can be exported around the world to enable cost-effective conversion of coal plants to renewable fuels.

Turning to the Atikokan generating station in northern Ontario: It's receiving recognition as the home of a former coal-fired plant that is now North America's largest power plant fueled completely by biomass. OPG completed the conversion of the 205 megawatt Atikokan station to biomass last year, and the station is now generating electricity and helping meet local power needs in northwestern Ontario. OPG's conversion at Atikokan began in 2012, which included construction of two silos and boiler modifications to accommodate the biomass. The project employed over 200 skilled tradespeople and technical workers. Atikokan is expected to generate

150,000 megawatt hours of renewable power annually, representing enough to power approximately 15,000 homes each year.

The biomass used to fuel the Atikokan generating station is being harvested and processed in Ontario. Domestic suppliers have leveraged this opportunity to also secure contracts to provide pellets to international buyers.

More recently, in July 2015, OPG announced it will decommission the Nanticoke generating station and preserve the Lambton generating station for another year—

The Chair (Ms. Cheri DiNovo): I'm afraid your time is up now, government side. We will move to the official opposition. Mr. Yakabuski.

Mr. John Yakabuski: It's such a great feeling to be missed, and I'm glad I could make the minister's day. I got down here as quickly as I could.

I heard a little bit while I was in front of the television and a little bit while I was here. It's interesting that you're having this happy time because what I see is that we were getting 3,082 megawatts out of our wind generators here in the province of Ontario. It's like it's time for a celebration. Bring out the marionettes or whatever and make all kinds of noise because this is a great day for Ontario.

What you're saying is you're really pleased that Mexico got a hurricane. Is that it? Is that what you're saying, Minister? Because that's why we've got the wind. Mexico got a hurricane; we get some wind a few days later and we have a great moment—short lived—of production from the wind turbines.

So what do you do when the wind stops? What do we do when the wind stops and the unpredictable nature of the wind is down to—do you remember those days when we were getting three megawatts total out of our wind fleet? Yes, three megawatts. The deputy minister will remember those. He'll remember those days when we were getting three megawatts out of all of our installed capacity of wind.

Your argument actually speaks to ours: that the cost of the wind, because of its unreliability by nature, has forced us to build all kinds of gas plants to back them up. So the gas plants are there as a backstop when the wind doesn't blow. You're having a great day today, but tomorrow might be different and the next day might be different yet again. That's why we need a system that is continuously and consistently reliable, such as our nuclear fleet. Unless they're down for maintenance—some of it scheduled, some of it from time to time—the reliability of our nuclear fleet is among the best in the world. Sometimes they're down for unplanned outages, but for the most part they're down for scheduled maintenance and we can depend on that.

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But to sit back there and chortle because you've having a great day because Mexico had a bad one is, really, a bit sad. That's why we're getting the wind that we're having today. We won't have that tomorrow. If you'd like to lay odds on that, I'll be glad to put it down

on the table. But don't stand up and jump up and down and shout like you've saved the world because you're having a great day of wind today, because wind is controlled by nature. You'll have good days and you'll have bad days, but this is—

Interjections.

The Chair (Ms. Cheri DiNovo): I'd remind members to speak through the Chair, not to each other.

Mr. John Yakabuski: This is not something that you should be celebrating just because someone else had a disaster. Shame on you.

Anyway, I'm going to pass it on to my colleague Mr. Smith for now.

Mr. Todd Smith: Thanks. Just to go back to some of the questioning that Mr. Hatfield had started, I wanted to touch on the Hydro One sale again. I just wanted to clarify, Minister, that the \$2.6 billion in departure taxes—that's originally paid with taxpayer money; correct? The \$2.6 billion in departure taxes.

Hon. Bob Chiarelli: We went through the departure tax in great detail when Mr. Tabuns was asking the questions, and I'm going to refer it again to Deputy Imbrogno. I suspect the answer will be the same, but perhaps we can give him the answer.

Mr. Serge Imbrogno: So Hydro One would pay the departure tax. I'm not sure if that is an answer to your question.

Mr. Todd Smith: Right. Hydro One pays—

Mr. Serge Imbrogno: Hydro One is a corporation and it pays the departure tax. I think we've explained before that the departure tax applies to all corporations that are leaving the PILs regime, so it's not just a Hydro One tax. A municipal electricity utility, if they go private, would also pay departure tax. It's part of the income tax system, so it's not a new tax that's imposed or specific to Hydro One. It's specific to the Hydro One situation—

Mr. Todd Smith: And the money that we're talking about came from where?

Mr. Serge Imbrogno: The money comes from Hydro One. They would pay the tax.

Mr. Todd Smith: So the money that comes back to the province, though, as a deferred tax benefit—it comes back as a deferred tax benefit, correct?

Mr. Serge Imbrogno: No. I think counsel has explained before that there are two different—the numbers are the same, but they're two different pieces of it. We can get Sharon to explain that part again, because it's an unfortunate circumstance where the two numbers are the same, but they're a different calculation.

Ms. Sharon Geraghty: The deferred tax benefit that you mentioned arises out of the same set of circumstances, but it has two pieces to it. It's caused by the impact of having its assets moved up to their full market value and the addition of eligible capital expenditures to the books of Hydro One. When that happens, Hydro One's accountants look at that and they say, "As a result of that, in the future this company will have a tax benefit." So they recognize something, and they call it a "deferred tax asset."

Previously, before this transaction, there was a deferred tax liability. So the account had a liability of about \$1.355 billion—I'm going from memory. By the elimination of that liability and the addition of the deferred tax asset of—they add to \$2.6 billion; I'm going from memory, but I can quickly—I think it's \$1.45 billion. The two add to \$2.6 billion. That means that going forward, the balance sheet of Hydro One basically goes up by \$2.6 billion, but it's not the same \$2.6 billion that they actually have to pay by way of departure tax.

That payment of departure tax arises because when it leaves the tax-exempt regime—we call it the PILs regime as well. When that happens, because it gets the value of its assets written up for future tax purposes, the government collects what is called a departure tax, which is like a tax as if they'd taken all their assets and disposed of them at fair market value—that's a gross oversimplification, but it's the right way to think about it—and they'd pay a tax on the gain, if you will, and that's \$2.6 billion. The two amounts are the same, but they're different.

Mr. Todd Smith: Okay. The press release that was issued indicated the possibility that the government is including the \$2.2 billion in their total revenue of \$9 billion from the sale of Hydro One.

Ms. Sharon Geraghty: I will defer to the deputy. The \$2.2 billion is an estimate of what that change in the balance will be, the 1.355 in the balance—I've just flipped, so I don't mislead you on the numbers—which is—

Mr. John Yakubski: It's 1.05.

Ms. Sharon Geraghty: No, I don't think so. Just a sec. The 1.355 is the elimination of the liability, and 1.245—if that's what you said, MPP, I apologize—is the addition, the recognition of the deferred tax asset.

Those two add up to 2.6, and 85% of that—which is an estimate—85% of that estimated amount is about \$2.2 billion, and that's the amount that you see referred to as one of the benefits of the transaction.

Mr. Serge Imbrogno: I think what the press release says is that the government wants to dedicate all the net benefit of the transaction to the Trillium Trust. So whether it's a cash gain or a non-cash gain, they want to credit the Trillium Trust with the full amount. The \$2.2 billion—85% of the \$2.6 billion—would be credited to the Trillium Trust, and that would be part of the \$4 billion.

Mr. Todd Smith: Are you counting the \$2.2 billion as part of the net profit from the sale of Hydro One?

Mr. Serge Imbrogno: It's considered a net gain to the province. On the province's balance sheet, it would go to reduce the deficit, so it is a gain. It's a non-cash gain, but a gain. I think, to be consistent, the government is saying that whether the gain is cash or non-cash, we're going to credit the Trillium Trust with that amount.

Mr. Todd Smith: I know when we met last week, Mr. Imbrogno, you said that the \$4 billion that we're talking about—this is the \$4 billion, separate from the \$5 billion that goes to pay down the debt. Of the \$4 billion, you said that would include the \$2.2 billion.

Mr. Serge Imbrogno: That's correct.

Mr. Todd Smith: That's correct?

Mr. Serge Imbrogno: Yes.

Mr. Todd Smith: Okay. It seems that the government press release is tying the two together. So that's accurate, then, that the \$2.2 billion is included within that \$4 billion pool of money?

Mr. Serge Imbrogno: Yes. I think the press release is also saying that the government intends to make changes to the amendments to the Trillium Trust Act to ensure that that happens: Put the Hydro One shares in, and also credit the non-cash gain as well. It's intended to clarify the approach going forward.

Mr. Todd Smith: So if the \$2.2 billion that we're getting back is counted as a benefit for the province, and it comes from the departure tax—

Mr. Serge Imbrogno: No.

Mr. Todd Smith: It's not?

Mr. Serge Imbrogno: No, no.

Mr. Todd Smith: It's completely separate?

Ms. Sharon Geraghty: I'm sorry to interrupt. The departure tax is the payment of tax that the company has to make. What's happening on its balance sheet that creates the gain the deputy was describing is not the departure tax. The departure tax is a tax liability that the company will pay at the closing of the transaction. It's an agreed amount; it's fixed; it's \$2.6 billion. The other amount is an estimate, as I said.

They both relate to this write-up of assets, but they are different things in the financial statements of Hydro One. One is an actual cash outlay of tax money, and the other is a change in its deferred tax balance. It's an accounting balance in the financial statements of the company.

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Mr. Todd Smith: So in order to realize any physical money from the \$2.2 billion, which is non-cash, will the province have to borrow against it?

Mr. Serge Imbrogno: I think that's more of a question for finance, in terms of how they would credit the Trillium Trust and whether they would have to do additional borrowing or some other commitments. It's hard for me to answer that. I think that's a question for finance.

Mr. Todd Smith: Minister?

Hon. Bob Chiarelli: I'd go with that answer.

Mr. Serge Imbrogno: I think it will be part of the budget, how they move the Trillium Trust forward with the timing of outlays versus the borrowing requirements. It is a non-cash item. I leave it to finance because I don't want to give you an answer that may change with the budget.

Ms. Sharon Geraghty: The only thing that I would add to that is that it's a non-cash item. It's an addition in the assets on the financial statements of the province.

Mr. Todd Smith: What we're doing here is generating cash from the sale of Hydro One to be used for infrastructure. That's the game plan here; right? I'm just not clear if we're actually generating the cash that the government is saying that they're generating from this sale to be used for infrastructure. I know we don't know because

we don't know. We can't forecast the future. But this is \$2.2 billion we're talking about here, too. I don't understand if the province is going to have to borrow against that sum of money.

Mr. Serge Imbrogno: It is a non-cash item. It will be through the budget and decisions made through finance, how they would fund the Trillium Trust going forward and when monies are expected to come out to fund infrastructure.

But I think the principle is that you have a fiscal benefit that results from this transaction. Some of that benefit is fiscal gain that's driven by proceeds; part of it is also non-cash gain. The government wants to commit all of that fiscal gain to the Trillium Trust, so I think it's being consistent with the principle. Some of it is cash, some of it is non-cash, but together, that's the gain that comes to the province from selling its shares in Hydro One.

Mr. Todd Smith: When we're looking at the numbers here, it looks like, after the \$5 billion is used to pay down the debt, there may only be \$1.8 billion in cash assets from the sale. Is that a possibility, that there's only \$1.8 billion for the Premier's lofty goals of paying for infrastructure across the province?

Mr. Serge Imbrogno: Again, the fiscal benefit: Part of it is cash and part of it is non-cash. I think it's important to understand that you're committing a gain, whether it's a cash item or a non-cash item, towards infrastructure.

The Chair (Ms. Cheri DiNovo): Mr. Smith, you have just about five minutes left.

Mr. Todd Smith: That's plenty.

There are grave concerns here, that we're selling off Hydro One without any concrete plan that is going to produce the kind of money that we need in the province to pay for the promises that the Premier has made. Every time she stands up in the Legislature, she talks about an LRT here, an LRT there, from Niagara to Kitchener to Barrie and all over the province. Obviously, this sale is not going to produce the kind of money that it's going to need to pay for those types of projects. Would you not agree with that, Minister?

Hon. Bob Chiarelli: The transaction is planned to accommodate the \$5-billion reduction in debt and \$4 billion to invest in infrastructure. We understand, from the IPO process, that we're on-track to accomplish that. I expect in the coming weeks, when the first tranche of the IPO is complete, that process will be more apparent.

Mr. Todd Smith: Well, we're going to hear tomorrow morning from the Financial Accountability Officer on his thoughts on this sale. Of course, keep in mind he's been excluded from participating as an officer of the Legislature when it comes to this deal, but tomorrow morning, he's going to be providing his recommendations or his analysis on this deal. I don't know, because I haven't seen his report either, but I suspect there's probably going to be a number of questions raised about the plan that's been put on the table and whether or not it's going to produce the kinds of dollars back to the province that will pay for these projects.

It's unfortunate that we're wrapping up here today and we won't be able to question you in estimates on the FAO's report. Have you had a chance to see it yet?

Hon. Bob Chiarelli: I have not seen the financial officer's report. I believe it's not public. It will be public tomorrow. I understand that the Minister of Finance will be responding to that, and you'll have every opportunity to ask him questions.

Mr. Todd Smith: Yes, and then we will be asking him questions tomorrow, of course, about this deal. Do you not have any reservations at all that this sale will not produce the kinds of dollars you have anticipated it will?

Hon. Bob Chiarelli: We expect the IPO will proceed as planned. If there's a calamity that happens with respect to something in the marketplace or something, then that obviously might have an impact—likely have an impact—but if the present fluctuations in the marketplace continue through until the first tranche of the IPO is completed, we have a confidence level that our projections and our plan will be realized.

Mr. Todd Smith: This will probably be my final question: Will you delay the sale as long as you need to in order to ensure the best price for Ontarians? If there is a calamity, as you mentioned, would you delay the sale as long as you need to in order to ensure the best price for Ontarians?

Hon. Bob Chiarelli: I can say that, by all accounts and all our advice and all the input that we have now, we're on track to accommodate the plan that's been put forward.

I'm going to ask counsel if she wants to clarify that in any way.

Ms. Sharon Geraghty: No. I was only going to caution us not to go too far, Minister, but you've answered the question, and I think that's the response.

Mr. Todd Smith: Because once it's gone, once the asset is gone, it's gone. You can't sell it again. So we have to ensure that we're getting the biggest bang for the buck, that we're maximizing this sale.

Hon. Bob Chiarelli: We believe we're maximizing the sale with the plan that we have in place. In the coming weeks, there'll be more information to confirm where we stand and—

The Chair (Ms. Cheri DiNovo): I'm afraid that time is up for the official opposition.

Hon. Bob Chiarelli: —and you will hear from Mr. Clark and the Minister of Finance to explain that reality to you.

The Chair (Ms. Cheri DiNovo): We will move on to the third party: Mr. Hatfield.

Mr. Percy Hatfield: Some of us believe it's a fire sale more than maximizing the sale. However, let me go back to a question: From the Hydro One prospectus, we see a bunch of closing transactions. The \$2.6-billion departure tax is paid; \$2.6 billion in share equity is issued to the government. There's the transfer of Hydro One Brampton to the government, and there are recapitalization transactions.

After all of these transactions are completed, we see that Hydro One's book equity increases from \$7.913 billion to \$9.386 billion. Last year, the OEB allowed Hydro One to claim a return on equity of 9.3%, but after these closing transactions, Hydro One's equity will increase by almost 20%. Does this mean Hydro One's OEB-regulated profits will also rise in order to maintain a similar rate of return on equity?

Mr. Serge Imbrogno: I think I could start, and then maybe Sharon can also provide some input.

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I think it's important to clarify that the Hydro One distribution rates are already set for the next three years, and the Hydro One transmission rates are already set for the next two years, so there's going to be no change in Hydro One rates.

Mr. Percy Hatfield: For two years?

Mr. Serge Imbrogno: Two and three years. The OEB sets Hydro One's rates. They set it on Hydro One's rate base, which is calculated in accordance with OEB requirements. It's really, when you think of it, as they build more capital, they can add capital to the rate base, and that's what the OEB uses to determine the amount that it can actually get. So once you've established its rate base, then the OEB has a deemed debt-to-equity ratio of 60% debt to 40% equity, and it's on the rate base. This is all approved by the OEB. It's all set on the rate base. The actual ROE that they get—the percentage—is calculated by a formula each year.

In the prospectus, Hydro One notes that for 2016, they expect the actual return on equity to be lower in 2016 than in 2015 because of changes in interest rates. Interest rates go down; the actual rate goes down as well.

Mr. Percy Hatfield: Either the regulated rate of return will stay the same, meaning that rates will have to increase to keep up with the increase in equity, or the OEB will have to lower the regulated rate of return in order to keep rates the same.

Hydro One earned an income of \$749 million last year, so to earn the same income on \$9.386 billion of equity would mean that the return on equity would need to fall from 9.3% to 8%. Which will happen? Will rates rise or will the return on equity fall, over the next couple of years?

Mr. Serge Imbrogno: Rates are not going to rise. We have already said that they're set for the next two years for transmission, and three years for distribution.

But the 60/40 debt-equity ratio is deemed, and it's applied to the rate base. So I think there's GAAP accounting in what you see, and then there is what the regulator allows to be recovered from the rates. They also don't allow non-regulated assets to be recovered in the rate base. So I think there's a difference between the GAAP accounting and how the OEB actually sets its rates, how it puts in place a deemed capital structure, and then how the actual return—the ROE formula—is calculated each year, based on the change in interest rates.

Mr. Percy Hatfield: I know Ed Clark, the minister and the Premier have all made statements about where

the rates would go after Hydro One is sold. We know the answers. Right? It's the OEB that sets the rates. So it seems pretty clear that if Hydro One's equity increases and the regulated rate of return on that equity stays the same, then rates will increase. Is there a possibility that the OEB would allow rates to rise to reflect Hydro One's rising equity? Am I getting this straight, Chair, or is it all messed up?

Ms. Sharon Geraghty: I'm going to echo something that the deputy minister said. The numbers that you're referring to are accounting equity, but rates are paid and the calculation is paid based on the rate base, so it's the rate base that the OEB starts with and then they have a deemed allocation, a deemed debt-equity ratio, and they allow the company a rate of return on the equity portion of its rate base. It's not on its equity in its books; it's on the deemed equity, 60% of its rate base. To echo what the deputy minister was saying, the change that you're referring to in the equity of the company is not what the OEB awards, if you can say that, the ROE on. It takes its rate base, it assumes 60% of that is equity—I knew that didn't sound right—60% is debt, 40% is equity, and then they allow a rate of return on the equity portion of that rate base.

I'd be happy to walk through what's happening on the financial statements, but one of the things that happens on the financial statements is that some of the adjustments that you're mentioning won't necessarily, any of them, affect the rate base. That's a separate thing that the company does as it expends on capital expenditures. Once the existing rate application and existing decisions reach their end, then the company will go for its next rate applications. But it's not as if they go to the OEB and say, "Our equity is now X; we get 9.3% on that." It's based on 40% of their rate base.

Hon. Bob Chiarelli: I can maybe try to use some other words to clarify it. The OEB will deem there to be a specific equity according to their formula. Regardless, you can throw all kinds of money and investment into the company and the equity goes up. That's not the equity calculation that the OEB will use. They will deem it according to what they have as a formula of, first of all, 60% debt and 40% equity. If you go above the 40%, you don't get credit for it.

Ms. Sharon Geraghty: One of the things that's happening in the financial statements has to do with that deferred tax asset, which we talked about. But that is part of the tax treatment that the company will have. It's an accounting entry based on the tax treatment, and that doesn't dictate what the OEB does with the—

Mr. Percy Hatfield: Let me just get to that, then. According to the Hydro One prospectus, as a result of leaving the payments-in-lieu system, Hydro One will book a \$1.2-billion deferred tax asset because of a revaluation of assets. On page 158, it says: "Management believes this will result in annual net cash savings over the next five years due to the reduction of cash taxes payable by Hydro One."

I see that the OEB has the power to force Hydro One to pass on these savings to the consumer since it is a risk

factor listed on page 158. But the prospectus says investors will likely get to keep the windfall. On page 106, it says: “Management believes that these net cash savings will not result in a corresponding reduction in its revenue requirement in future rate applications to the Ontario Energy Board.”

So if Hydro One is receiving a windfall solely because of privatization, not because of efficient management, why should shareholders benefit instead of ratepayers?

Mr. Serge Imbrogno: When you go to the OEB with your rate application it’s a determination of the OEB as to how they treat these items. I think management is giving you their perspective on how they feel the treatment of the OEB will be, based on past precedents and other such actions. In the end, it’s a decision of the regulator, how they treat that going forward. I think what you see in the prospectus is management’s expectation of how they think it’s going to play out.

Hon. Bob Chiarelli: The OEB may accept your interpretation. A case can be made to them and it’s their decision.

Mr. Percy Hatfield: All right. Do you think it’s appropriate for Hydro One and its shareholders to claim unearned profits that are solely the result of accounting procedures related to privatization and have nothing to do with efficiency gains or clever management?

Hon. Bob Chiarelli: I’m prepared to wait to see how the transactions play out and how the Ontario Energy Board deals with it.

Mr. Percy Hatfield: Well, if it plays out the way I’ve suggested, would you direct the OEB to ensure that this windfall is passed on to the ratepayers?

Hon. Bob Chiarelli: It’s a very hypothetical question; I’m not going to give a hypothetical answer.

Mr. Percy Hatfield: All right. The government has said it will no longer issue shareholder directives such as the directive that currently prohibits the offshoring of Hydro One customer support jobs. I understand that KPMG prepared a report in 2013 that said that Hydro One could save money by sending consumer support jobs out of the province. Again, these savings would not be due to anything management did, but simply due to a change in government policy. Do you think it’s appropriate for Hydro One’s new private owners to claim unearned profits simply because the government decided to stop protecting Ontario jobs?

Hon. Bob Chiarelli: I’m going to ask the deputy to respond to that.

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Mr. Serge Imbrogno: I think the issue of outsourcing really is a Hydro One management decision. I think they’ll look forward in negotiations with the unions in terms of what is the best path forward. We do have restrictions in place in terms of ensuring the head office remains in Ontario. We have measures in place to ensure the grid control centre remains in Ontario. So we have protections in place to protect the critical infrastructure and the strategic policy-making.

Mr. Percy Hatfield: But, Deputy, why not put a structure in place that would protect the outsourcing of jobs from Ontario?

Mr. Serge Imbrogno: I think that’s one of the many decisions that the new Hydro One board and management will make. I think it will be part of the discussions with the unions, going forward. It will be part of ensuring that they maintain the reliable service and customer service. If there’s anything that would impinge that, then I think that would be something that Hydro One and its board would not pursue—

Mr. Percy Hatfield: Minister, I would think that—

Hon. Bob Chiarelli: If I can make a comment to that—

Mr. Percy Hatfield: Please.

Hon. Bob Chiarelli: While Hydro One will operate like any other public company reporting to its board of directors and shareholders, as part of the 2014 budget, our government amended the Electricity Act to ensure that the head office, control centres, operation of transmission and distribution systems will remain in Ontario. That provides some comfort level in the sense that, if it does occur, it probably will occur to a very limited extent.

The infrastructure investments that become possible as a result of broadening the ownership of Hydro One will support 110,000 jobs per year on average, so the proceeds will be part of that project. That will go towards creating 110,000 jobs per year. I can say that, as a former Minister of Infrastructure during the stimulus program, that type of investment in infrastructure does create those types of jobs.

Two of the largest electricity unions, the Society of Energy Professionals and the Power Workers’ Union, voted overwhelmingly in favour of taking Hydro One public. They are the two unions most directly impacted by our plan to broaden Hydro One’s ownership. They are aware of this particular issue, and they were prepared to go ahead and move forward, because on balance it was good for energy workers and it’s good for creating jobs across the province.

Mr. Percy Hatfield: But, Minister, you know as well as I how many times we’ve heard the Premier say that by splitting the shares the way they’re being split, the government is going to maintain control, if you will, of the board, and how politically sensitive that would be if any jobs were outsourced while under the government’s political control.

The Chair (Ms. Cheri DiNovo): Mr. Hatfield, you just have over five minutes left.

Hon. Bob Chiarelli: I think I’ve answered the question.

Mr. Percy Hatfield: Thank you, Chair. How much time did you say again?

The Chair (Ms. Cheri DiNovo): Just over five minutes.

Mr. Percy Hatfield: Five minutes? Oh, thank you.

I just have one thing I’d like to find out, as well. Is it at your fingertips or is it possible to get at some point in

the near future—I'm looking at the liabilities for contaminated sites for Ontario Power Generation and Hydro One. Do you have a list of contaminated sites and the dollar figure amounts for each of their liabilities for contaminated sites?

Hon. Bob Chiarelli: Deputy?

Mr. Serge Imbrogno: I think whatever is in the prospectus is what's publicly available. I think our problem is providing information that's not in the prospectus.

Mr. Percy Hatfield: Okay.

Mr. Serge Imbrogno: Also, Hydro One makes applications to the OEB on a regular basis, so it could be part of their rate filings in the past. I think that's another potential avenue for having that information.

Mr. Percy Hatfield: Okay. Cybersecurity, Minister: I think you have said that the biggest risks to the hydro system are extreme weather and cybersecurity. Who are you looking to as a model jurisdiction for action on cybersecurity? Are you looking at California or Germany for their examples, or have there been any incidents of cyber-attacks in Ontario?

Hon. Bob Chiarelli: Before I pass it over to the deputy, I'll say that there are continental regulations that apply to those connected operating systems that I referred to earlier. They are among the best, most experienced people in the electricity sector, with the best advice. They have made it very, very clear that for the whole electricity sector in North America cybersecurity and extreme weather events have become the two largest risk factors.

I think everybody is aware of the fact that a number of significant multinational companies have had their systems impacted by breaches in cybersecurity. It is a top priority in the electricity sector. They are working collaboratively to get the best practices to deal with that particular issue.

With respect to extreme weather events—

Mr. Percy Hatfield: Minister, I'm sorry to interrupt, but are you aware of any incidents in Ontario of cyber-attacks on the electrical system?

Hon. Bob Chiarelli: No, I'm not, but we do have a fully redundant system in Ontario that can go into operation if something happens to the system that's up.

Mr. Percy Hatfield: Who is leading the research and action in the system?

Hon. Bob Chiarelli: I don't have the detail on that—

Mr. Serge Imbrogno: Maybe I could add—

Mr. Percy Hatfield: Sure.

Mr. Serge Imbrogno: The IESO is part of—I think the minister mentioned—the North American Electric Reliability Corp.'s Critical Infrastructure Protection Committee, and that's really cybersecurity for the bulk system, the transmission. The other part of that is the local distribution companies, and really it's an OEB process. The OEB has been looking at making sure that the LDCs are as up-to-speed on cybersecurity as the IESO in the bulk system.

The OEB is taking action, and maybe I'll just read you some of the things that they are requiring the LDCs to put in their plans. Going forward, they'll require the LDCs to

participate in the Canadian Cyber Incident Response Centre; enrollment in the Public Safety Canada secure portal; training for staff in recognizing and avoiding phishing attacks; actions for detection, response and recovery from cyber-attacks that comply with National Institute of Standards and Technology.

We have two pieces to that. In the bulk system, the IESO is linked in with the United States and North American standards, and then the OEB is putting standards in place for the LDCs as well. We're trying to cover the bulk system and LDCs as well, with the OEB leading on setting those standards for the LDCs.

Mr. Percy Hatfield: Thank you, Chair.

The Chair (Ms. Cheri DiNovo): Thank you very much. We now move to the government side.

Ms. Sophie Kiwala: Thank you very much for your time here at this committee. It's been a pleasure to listen to the discussion and learn more about the energy system in Ontario.

When it comes to the electricity system in Ontario, one of the things that I do hear frequently from constituents in my riding of Kingston and the Islands is that there is a need for increased education and awareness on the factors that affect peoples' bills, the environment and the whole system in general. Increasing the energy literacy of Ontarians will not only help them understand how the system works, but it will also teach them innovative ways that they can reduce their consumption and save money on their hydro bills.

We have seen some innovative programs that have been utilized by our community, both on a residential and a commercial basis. I'm wondering if you can tell us what the government is doing to help increase the energy literacy and education of Ontarians.

Hon. Bob Chiarelli: Thank you very much, MPP Kiwala, for the question. It is a question that comes up regularly, particularly when we deal with stakeholders in the sector. We have our discussion and debates here and we talk about the connection between the different types of generation and supply mix, and there's even the question of a lot of people being very confused about who does what.

1700

For example, most people in the province think that Hydro One looks after the whole electricity sector. They forget about Toronto Hydro and Ontario Power Generation. There's just a lot of confusion. A lot of people would not be aware, for example, that Hydro One, in terms of the people who they bill directly for services, represents only 24% of the consumers in the province of Ontario. The other 76% receive service from Hydro Ottawa, Toronto Hydro, PowerStream and a total of 70 local distribution companies.

So when people talk about the terrible impact on rates, as we continue to say, the OEB controls the rates. There are 76% of people who receive their bills from a non-Hydro One entity. That type of information is not out there and it's very, very important that we try to get that out.

There's a tremendous amount—a number of conservation programs that enable people to reduce their energy consumption. It's important that there be more literacy out there in terms of conservation.

Promoting energy literacy among Ontarians is a top priority for the Ministry of Energy. Our government launched a website dedicated to educating Ontarians about their electricity system. The website is called emPOWERme. It provides an excellent overview of Ontario's energy sector and explains how generation, transmission and distribution networks function together to ensure everybody has access to the clean and reliable electricity they need.

I might also indicate vis-à-vis MPP Ballard being able to go on his iPhone, check the app and see that at that very moment in time, 20% of our electricity in the province was being generated by wind power—that's out there and probably 5% or 10%, if that, of the public with iPhones are aware of the fact that they can go on and check that. So there's a lot of mentoring and education that's needed to inform the public.

The emPOWERme website offers a number of video shorts that explain electricity generation, distribution, measurement and conservation. The site also includes an interactive bill tutorial so people can understand. A lot of people are concerned about the delivery charge on their bill. If you ask them, "What's the delivery charge?" they really can't tell you. They don't understand what the delivery charge is. That's not a good situation for the public or for the system.

The site also includes infographics and interactive exhibits about Ontario's supply mix and smart grid innovations that would enable them to use conservation programs. The emPOWERme website is accessible to Ontarians of all ages. I certainly would highly recommend that members encourage their constituents to take advantage of this resource. It wouldn't take very much for every MPP of every party to put a little box on their householders directing people to the emPOWERme website. It's really empowering in the sense of having knowledge and information as to how the system works.

We believe that this will deliver real benefits to the province and the sector, including a more energy-literate Ontario public that can better understand the trade-offs inherent in energy policy choices. More empowered customers are better able to manage their own energy usage and help system-wide conservation efforts as a result.

As I mentioned at one of our other sessions in these estimates discussions, we talked about EcoSchools. EcoSchools start the education early in elementary and high school. The ministry is funding Ontario EcoSchools to increase energy literacy and energy conservation education for students, to empower students to reduce the ecological footprint of their schools and to create environmentally responsible citizens.

The Education and Capacity Building Program, the ECB Program, administered by the Independent Electricity System Operator, the IESO, provides funding for

initiatives that provide education, build capacity and develop skills of target groups, including aboriginal communities, municipalities and co-operatives, to better understand and participate in the electricity sector.

Additionally, the ministry recently introduced legislation which is titled Strengthening Consumer Protection and Electricity System Oversight Act, 2015, which would enhance consumer awareness and understanding of retail energy contracts. The legislation also promotes the education of consumers.

I'd now like to ask Deputy Minister Imbrogno and John Whytock, director of communications, to expand further on these points.

Mr. Serge Imbrogno: Thank you, Minister. I'll ask John Whytock to come up. He's our director of communications.

Part of our long-term energy plan was to ensure that all of the material that goes into the LTEP was made public and is on our energy reporting website. It is fairly technical, and it probably helps people who are very knowledgeable about the system, but we also want to make sure that we provide information to everyone. John will go through some of the other ways that we're trying to provide detailed and helpful information to Ontario consumers.

Mr. John Whytock: Thank you, Deputy. My name is John Whytock. I'm the director of communications for the Ministry of Energy. I'm also the leadership chair of our United Way campaign, so I would like to invite everyone to join us for the OPS Walk and Run to raise funds for the United Way, which is taking place at Queen's Park this Friday. The Premier is attending, as is the secretary of cabinet.

Within my branch we handle a number of communications functions, including the correspondence that comes in for the minister, the media and issues that we deal with every day, and the strategic planning. In April 2013, at the same time that Minister Chiarelli directed us to develop a new long-term energy plan, he laid down the gauntlet of a great challenge on literacy. Much of what he just spoke to on emPOWERme is actually the direct result of the imperative that he handed us to really develop energy literacy materials, so I'm glad he's proud of it.

We've seen numerous calls for increased energy literacy. It's been raised by the Environmental Commissioner, it's been raised by the Auditor General and by the Drummond report. It was a regular theme we heard as we were out consulting on the 2013 long-term energy plan. It was an exercise that took us to more public consultations than we had ever conducted before, and it allowed us to run an online survey that got 8,000 respondents. It allowed us to introduce a lot of themes about smart energy planning that people might not otherwise have considered.

Everyone agrees that greater energy literacy is a good thing. That's an easy one. But what is energy literacy and when can we as a ministry say we've done enough to advance it? That's a question that doesn't have a clear

answer. There is definitely the desire and the spirit to have more informed, more educated Ontarians, but it is not a single silver-bullet approach. There are a lot of challenges to it.

If there's one thing we do have at the ministry and with our agencies, it's data. Our ministry just published its fourth quarterly Ontario Energy Report, which has over 60 sets of data about energy demand, supply mix, conservation and demand management, and more. So if someone went looking for it, there are charts and tables on virtually every aspect of the system. But unfortunately, in reality, most people don't ever go seek out this information. They don't take the time to study charts and graphs to form a more illuminated opinion about energy policy. Would that it were that easy; my job would be very simple.

This year, the World Bank's World Development Report for 2015 focused entirely on human decision-making, and it has a wonderful quote that I think explains some of the challenges that we have in literacy: "Individuals are not calculating automatons. Rather, people are malleable and emotional actors whose decision-making is influenced by contextual cues, local social networks and social norms, and shared mental models. All of these play a role in determining what individuals perceive as desirable, possible, or even 'thinkable' for their lives."

The shorthand for this, if I were to translate on their behalf, is that people are part of a community. They're part of a society and that affects their decision-making. It isn't entirely rational. So instead of hoping that people will independently make purely logical decisions based on data, of which we have quite a bit, we have to take it upon ourselves to try to highlight what our data is telling us.

1710

I want to give one example of how better awareness can lead to tangible action that has real benefits for the energy system and for consumers.

If you've looked in the long-term energy plan, there's a figure—it's figure 3 on page 12. It shows residential electricity intensity. It's a relatively easy chart to understand. It shows the number of households has grown in Ontario over the past 25 years, but the average amount of electricity that each house consumes has gone down significantly.

Now we would all be hard-pressed to find a house in this province that hasn't done something to conserve energy, whether it's switching light bulbs, buying more efficient appliances or adding insulation to improve their home's energy efficiency. In fact, if you look at this figure, you'll realize we have added 1.7 million new households since 1990—one generation effectively, 25 years. But overall, electricity demand from those houses is still about one million megawatt hours lower than it was in 1990.

Another way of looking at that is a typical household only uses about two thirds of the power it did in 1990. It's as if, through conservation and efficiency, we have removed every third home from the grid. When you

further consider how many more electronic devices we have charging in a typical home compared to 25 years ago, that's a remarkable accomplishment.

Unfortunately, when we've done public polls in the past, most people say and believe the opposite. The average respondent will tell you that they've made efforts to save energy, but they don't believe their efforts are making a difference. They can't see the change, and that's an unfortunate disconnect when the fact is that as a province, all together, we have made tremendous gains.

We took this data that I just referred to and the insight to one of our agencies, the Independent Electricity System Operator—they oversee the saveONenergy conservation campaign. With them, we developed a public outreach campaign that we tested in three cities this past summer. We ran ads that connected a community's energy savings to large-scale accomplishment; for example, saving enough electricity to run a city's arenas for several years. This was a very limited experiment—just three communities and eight weeks—so the results were modest, but they were promising.

The feedback from our research is that there was an increase in people understanding the link between their energy use and benefits to the broader community. The next phase is to determine whether that understanding can have a measurable impact on consumer behaviour.

Now I use this example to demonstrate that energy literacy is a multi-tiered effort. We'd like to think that if only people had the information, they would all be able to make good, rational decisions for themselves, but evidence generally shows that's not enough. Effective energy literacy has to consider what outcomes are valued by people and by entire communities.

However, we are seeing more and more examples of putting electricity data to work to help consumers, and this includes cases where the private sector takes publicly available data and turns it into something with added value. In fact, one of those was mentioned earlier in this session. It's the Gridwatch mobile app. It's a great example. It takes current energy supply mix data from the IESO and publishes it in an easy-to-understand, mobile-friendly way, but not everyone realizes—

The Chair (Ms. Cheri DiNovo): The government has about five minutes left.

Mr. John Whytock: Thank you.

Not everyone realizes that Gridwatch is not actually a tool designed by the IESO, but it depends on IESO data for its existence.

Green Button initiative data is being used by more and more app developers to help consumers find just the right energy management tool that suits their tastes best. Today, more than 60% of Ontario ratepayers are served by a utility that offers the Green Button initiative.

These initiatives are the reason that the Ministry of Energy is at the forefront of Ontario's broader Open Government Initiative. We're a leading ministry in efforts around open data, open information and open dialogue.

When we released the long-term energy plan in 2013, we also launched a new educational Web feature that was

built partly on learnings from the public consultations across Ontario. As the minister mentioned, the site is called emPOWERme and features a series of videos, interactive tools and infographics that can help explain the energy system. The videos, for instance, start with the basic fundamentals: Do people understand the difference between transmission and distribution? Do they know what the smart grid is? Can they explain what a kilowatt hour is? It is the most fundamental unit of measuring how we consume electricity in this province, and a startling number of people couldn't even define it. Do they know why conservation has system benefits as well as household benefits? So we've been building continually on emPOWERme since it was launched.

We're reaching out to educators and learning institutions to try to learn more about what content would be most useful for students and others. We're developing new materials, including a video to explain what peak power is and how it shapes our electricity system. And, as has been mentioned by previous speakers here, we've been a proud supporter of EcoSchools for some time. EcoSchools is a small organization of dedicated volunteers who will freely admit that they would welcome our assistance in increasing the reach to parents and communities. We know the importance of schools as anchors in communities and the value they can bring in spreading educational efforts.

The ministry is funding Ontario EcoSchools to increase energy literacy and energy conservation education for students, reduce the ecological footprint of schools and create environmentally responsible citizens.

The government is working with Ontario EcoSchools to bring more information about energy conservation into classrooms. EcoSchools is an environmental education and certification program for grades K to 12 that helps school communities develop both ecological literacy and environmental and conservation practices to become environmentally responsible citizens and reduce the ecological footprints of schools. We support their goal of making every school in Ontario an EcoSchool—a vision that all students and staff in Ontario schools, and by extension their parents and their surrounding community, will be engaged in environmental education and practices, developing the knowledge, skills, perspectives and actions needed to be environmentally responsible citizens.

Last year the ministry provided EcoSchools with approximately \$100,000 in funding to implement a new energy conservation education teacher professional development program. This year we intend to fund EcoSchools for expansion of their energy conservation education program. Now we're looking at ways to help their incredible volunteer-driven network by gathering more feedback on what teachers and students need. We're

also exploring ways to promote EcoSchool success stories, because we know that a school isn't just a building; it's at the heart of communities and it can have an influence far beyond its property lines.

Another emerging technology tool to help consumers is being piloted by several local distribution companies right now. It's called social benchmarking. What it allows people to do is to see how their energy consumption compares to similar households in their area. They can compare their progress to that of their neighbours. Behavioural research has shown that this approach is one of the most effective ways to drive long-term behaviour change. Simply put, people are motivated to save energy if they can see how they're doing compared to their peers. We're looking forward to the results of the pilots here in Ontario to see if this holds potential as a province-wide initiative.

I want to point out that the Ministry of Energy is not alone in its efforts to improve energy literacy. Our agencies have been active in consumer education as well. Conservation is the most cost-effective way to manage energy. If we can keep our demand down, it means we won't have to seek out as much new supply. We will work closely with the new IESO on our communication and marketing efforts for 2016 to help consumers save energy and money, and help local distribution companies meet their reduction targets.

Thank you again for your question, and I hope I've demonstrated how seriously we take energy literacy and the many ways in which we are approaching the challenge—

The Chair (Ms. Cheri DiNovo): And your time is up. Thank you.

Standing order 66(b) requires that the Chair put, without further amendment or debate, every question necessary to dispose of the estimates. Are the members ready to vote?

Mr. Han Dong: Yes.

The Chair (Ms. Cheri DiNovo): Shall vote 2901, ministry administration program, carry? Carried.

Shall vote 2902, energy development and management, carry? Carried.

Shall vote 2905, electricity price mitigation, carry? Carried.

Shall vote 2906, strategic asset management, carry? Carried.

Shall the 2015-16 estimates of the Ministry of Energy, including supplementaries, carry? Carried.

Shall I report the 2015-16 estimates of the Ministry of Energy, including supplementaries, to the House? Carried.

Thank you. We are adjourned until next Tuesday at 9 in the morning.

The committee adjourned at 1719.

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