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ISSN 1710-9477

**Legislative Assembly  
of Ontario**

First Session, 38<sup>th</sup> Parliament

**Assemblée législative  
de l'Ontario**

Première session, 38<sup>e</sup> législature

**Official Report  
of Debates  
(Hansard)**

**Wednesday 25 August 2004**

**Journal  
des débats  
(Hansard)**

**Mercredi 25 août 2004**

**Standing committee on  
social policy**

Electricity Restructuring  
Act, 2004

**Comité permanent de  
la politique sociale**

Loi de 2004 sur la restructuration  
du secteur de l'électricité

Chair: Jeff Leal  
Clerk: Anne Stokes

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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  
SOCIAL POLICY**

**COMITÉ PERMANENT DE  
LA POLITIQUE SOCIALE**

Wednesday 25 August 2004

Mercredi 25 août 2004

*The committee met at 1035 in Courtyard by Marriott, Ottawa.*

ELECTRICITY  
RESTRUCTURING ACT, 2004  
LOI DE 2004 SUR LA RESTRUCTURATION  
DU SECTEUR DE L'ÉLECTRICITÉ

Consideration of Bill 100, An Act to amend the Electricity Act, 1998 and the Ontario Energy Board Act, 1998 and to make consequential amendments to other Acts / Projet de loi 100, Loi modifiant la Loi de 1998 sur l'électricité, la Loi de 1998 sur la Commission de l'énergie de l'Ontario et apportant des modifications corrélatives à d'autres lois.

**The Chair (Mr Jeff Leal):** It being 10:35, I'd like to bring this meeting of the standing committee on social policy to order. Mr Marchese?

**Mr Rosario Marchese (Trinity-Spadina):** Yes, Mr Chair. I wanted to make a request. In Windsor, Steve Thomas made a presentation, and I know some people had lots of questions. I certainly did, although we didn't get an opportunity to ask them. In that view, having read his paper just yesterday, I think he's quite knowledgeable, and I think we would benefit from another 15 minutes from Steve. Given that he's coming with us in all of the meetings we're having, and he's available today, I request that if there's a spot open, we would permit him to speak again.

**The Chair:** Mr Marchese, indeed, we have an opening at 2:30. There was a cancellation, so Mr Thomas could appear then.

**Mr Marchese:** That's OK with the committee?

**Mr Ted McMeekin (Ancaster-Dundas-Flamborough-Aldershot):** Yes, we would agree.

**Mr Marchese:** Oh, there's somebody else.

**The Chair:** Mrs Cansfield, please, the parliamentary assistant.

**Mrs Donna H. Cansfield (Etobicoke Centre):** Thank you, Chair. Presuming that the gentleman has additional information to present on Bill 100 and that it would be limited to that presentation, I think it's an opportunity for us to hear additional information on his presentation, and it should be restricted to a presentation.

**The Chair:** I think that's fair. Mr Thomas will have the opportunity to speak to the bill and provide any additional information that's germane to this issue that he

didn't get the opportunity to provide us with when we were in Windsor. So if there's concurrence with everybody, I just need a quick show of hands and we'll move forward.

**Mr Marchese:** OK. Thank you.

**The Chair:** Thank you very much.

JON JENNEKENS

**The Chair:** The first presenter today is Mr Jon Jennekens. Welcome, sir. You'll have 15 minutes, and any part of the 15 minutes you don't use will be reserved for questions. Proceed, sir.

**Mr Jon Jennekens:** Mr Chairman, distinguished members of the committee, ladies and gentlemen, I very much appreciate the opportunity to share with you some of my thoughts on Bill 100. To begin with, I'd like to outline a few generic matters for your consideration.

Ontario must make a series of major investments in the infrastructure of its electricity sector during the next several years. These investments will have a significant impact on Ontarians' quality of life for decades to come. As the Manley report correctly states, the "electricity system is increasingly fragile."

Infrastructure investments by the government of Ontario on behalf of Ontarians are very important, a sine qua non of a prosperous future. But equally important are investments by the private sector. To encourage these investments, the government must take meaningful steps to ensure that a predictable market environment will prevail to allow the private sector to be reasonably assured of a fair, risk/reward-balanced rate of return on the investments.

The government must proceed on an urgent basis to prepare a comprehensive, multi-year, systematic series of investments in the energy infrastructure. The economic prosperity of Ontarians is at risk and, clearly, time is of the essence.

With the proposed phase-out of coal-fired stations, which were originally primarily intended to serve as load-following stations but in recent years have served as an important contribution to baseload demands—about 25%—the only feasible, practical source of new, large-scale, baseload generation is nuclear, currently about 40%. Hydraulic stations, of course, will continue to fill the very important functions of baseload, frequency control and load-following.

Combined-cycle natural gas generating stations will also continue to be an important secondary means of meeting peak load, about 8%. However, as you know, last week, three of Ontario's largest gas-fired plants were either operating at very low powers or were shut down, while the eight units at Nanticoke—coal-fired—were pumping out at high levels of power, of course, releasing to the atmosphere copious quantities of carbon dioxide, nitrogen oxides and the particulates that cause smog.

It's evident that the price of natural gas is again increasing, and it's increasing to the point where companies like Coral Energy Canada, TransAlta and Imperial Oil will not really think it's a good, sound basis for building additional capacity. Finally, the continued development of renewable sources of energy should be encouraged, realizing the limitations.

Energy efficiency does not mean conservation. Unrestricted availability of electricity and a high standard of living are inseparable. Conservation will not be a panacea to cure the ills of Ontario's electricity sector.

#### 1040

Turning now to Bill 100, on balance, the 10 purposes of the act enumerated in the bill appear to be commendable and well-intentioned. However, close scrutiny of the bill following second reading would be advisable, if only because it is not a simple piece of legislation. In fact, it is a very complex piece of legislation. Several questions are raised regarding the reorganization of certain entities and the proposed establishment of new entities: how these entities will interact with each other, how they will operate under ministerial oversight with the ever-present threat of ministerial directives hanging over their heads, and the possibility that the current and future governments may not observe the interlocking admonitions of the Manley report regarding past political interference in the management of Ontario Hydro and Ontario Power Generation and their misuse as instruments of public policy. Directives from the minister constitute a very powerful tool for the government, as do the regulations provided for in the bill. However, neither the IESO nor the OPA should be hampered by multiple layers of bureaucratic or regulatory review.

In reading Bill 100, I was reminded of something that was stated a little over 2,200 years ago, and I quote: "We trained very hard but it seemed every time we were beginning to form up in teams, we would be reorganized. I was to learn later in life that we tend to meet any situation by reorganizing, and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency and demoralization." Petronius Arbiter, 210 BC.

I think of the 1993 supposed reorganization of Ontario Hydro. In fact, it was a disorganization.

The Manley report refers to the definitions offered by the Organization for Economic Co-operation and Development, headquartered in Paris, and to the Canadian Institute of Chartered Accountants to explain the word "governance." Missing from the explanation are the words "competence" and "proper" governance. The

histories of Ontario Hydro and OPG are replete with examples of poor and improper governance. Improper governance must not be allowed to recur. The requirement for competence, of course, must begin with the chairman of the board of OPG and the other entities, and the members of those boards.

There is at least one omission from Bill 100. A large utility like Ontario Power Generation involves very complex generation and transmission facilities with sophisticated load management, control, protective and monitoring facilities, equipment and systems. The individuals who operate and manage these systems must be highly trained, beyond the academic qualifications they earned at university or in community colleges or high school and in the skilled trades. The successful return of Bruce units 3 and 4 to service after a six-year lay-up was due to the efforts of a team of Canadian experts in all ranks and all different occupational categories. It included all of Bruce Power's employees, with employees of several hundred contractors.

Bill 100 seems to be silent on the important requirement for the government of Ontario to ensure it has frequent and meaningful communication with Canadian nuclear workers.

If Canada is to meet its Kyoto commitments without severe economic disruption, all laid-up CANDU power reactors must be returned to service and operated at least until 2012, if not beyond. While renewable sources of energy are an important addition, their potential is probably something less than 10%.

The "hydrogen economy" is often mentioned in the Kyoto context. Hydrogen is extracted from natural gas, from methane and ethane, and from water. From water, it's extracted by separating the atoms of oxygen and hydrogen with electricity.

Electricity demand varies considerably throughout the day, as we all know, and not only the day but also throughout the week, throughout the months and throughout the seasons, with peaks occurring during the early morning and late afternoon/early evening. Nuclear power stations, for technical and economic reasons, cannot be operated on a load-following basis. Fortunately, hydraulic stations can. As you know, they often spill water at night and on the weekend when the head pond reaches its maximum level. Thus, hydrogen should be extracted from water by electrolysis during these off-peak hours, when the cost of the power is low. Of course, neither hydraulic nor nuclear stations produce greenhouse gases.

Nuclear power, as we all know, is the subject of much debate and a great deal of misunderstanding. France produces 78% of its electricity in nuclear plants. Sweden set aside the results of a 1978 referendum calling for the shutdown of all 12 of its nuclear plants. Today, Sweden generates 50% of its electricity in nuclear plants. Lithuania, Slovakia, Belgium, the Republic of Korea and Slovenia produce 80%, 57%, 55%, 40% and 40% respectively. Finland has recently decided to build its fifth nuclear station. It currently produces 27% of its

power in nuclear plants. Even Germany, the land of the Greens, in 2002 decided to extend the operating licence for its Obrigheim plant for another three years. India and China, the two most populous countries in the world, accounting for 40% of the world's population, have very ambitious nuclear power plans. Obviously, their energy planners are pro-nuclear.

In conclusion, I would like to add the following thoughts:

The ownership of OPG should remain with the government of Ontario in trust for the citizens of this province.

OPG should retain its ownership of nuclear, large electric and fossil-fuel stations. This should not preclude the entry into lease arrangements such as those with Bruce Power.

Self-sufficiency of reliable, competitively—that means “realistically”—priced, environmentally friendly electricity supplies with an adequate reserve margin should be OPG's primary technical objective. The social and economic costs to Ontarians of inadequate or unreliable electricity supplies would be enormous.

OPG and Hydro One should work together in concert to improve the security of their combined generation and transmission facilities.

I'd be happy to answer any questions.

**The Chair:** Thank you very much, sir. We have about two minutes left, and on this rotation I have Mr Chudleigh first, of the Progressive Conservative caucus.

**Mr Ted Chudleigh (Halton):** Thank you very much for your presentation. Could you give me your opinion on clean coal, whether or not that has a place in a future power grid?

**Mr Jennekens:** I would suggest it has a very minimal place. Clean coal, with all of the equipment that is required to reduce the emissions, is extremely expensive.

**Mr Chudleigh:** The expense of the clean coal—the raw product is still readily available and probably not subject to the same kinds of spikes that natural gas or liquid petroleum would have. If they were of equal cleanliness, would coal then have some merit, in your opinion?

**Mr Jennekens:** Most certainly.

**The Chair:** Next, Mr Marchese, quickly. We have about 30 seconds.

**Mr Marchese:** Mr Jennekens, you seem to be a very knowledgeable person in this field. Who do you work for?

**Mr Jennekens:** I'm retired. I served in the Canadian army. I served for three and a half years, including a year in Korea as a peacekeeper. I worked in nuclear operations at Chalk River for four years, and then I joined the Atomic Energy Control Board. I served as a staff member for 16 years, and the president and CEO for eight and a half. I then was appointed deputy director-general of the International Atomic Energy Agency in Vienna and head of the department of safeguards, verification of peaceful use, dealing with the Iraqis, the North Koreans—

**Mr Marchese:** You need five minutes just to give us the whole list of what you do.

**Mr Jennekens:** And I did inspections in Germany beginning in 1964. Ich spreche ein bisschen Deutsch.

**The Chair:** Thank you very much, sir. It was a very thoughtful presentation.

**Mr Jennekens:** I have left with Ms Stokes copies of my presentation.

**The Chair:** We appreciate that. Have a good day, sir.

1050

#### WILLIAM KEMP

**The Chair:** I'd now ask Mr Kemp to come forward, please. Mr Kemp, good morning and welcome.

**Mr William Kemp:** Good morning, ladies and gentlemen. Thank you for having us. I appreciate it.

First, by way of a quick introduction, my colleague, Nicole Foss, is president of ANF Energy Solutions, which offers policy and technical consulting services to the electricity sector, and is a research fellow with the Oxford Institute for Energy Studies. Ms Foss has previously published on nuclear safety and international governance in eastern Europe and worked in the field on European energy policy.

Myself, I'm an electronic software designer, specializing in high-performance embedded control systems for low-impact hydroelectric utilities worldwide. I'm also very experienced with renewable energy systems. I also live off the grid myself, as a matter of fact. I've published two books on renewable energy. I'm also chairman of electrical safety committees at the Canadian Standards Association.

As we all know, Ontario is facing an energy crisis. Projected curves for supply and demand demonstrate that Ontario will have insufficient electricity supply to meet demand before 2010. Indeed, Ontario needs to look primarily to the demand side for solutions, as only conservation and efficiency can deliver in the time frames available. Active consumers, motivated by much higher prices fluctuating with load, can do the same for Ontario as they have recently done for California. The overwhelming demand-side response in California solved its energy crisis in under a year, and did it without building new generation.

As a small aside, certainly people look to the upheavals in California as being a major problem. But once they crossed through the upheaval issues, we've now got to the point where we have stable electricity supply and costs in the state of California. All of this was done without the need to build any generation capacity at all in the state. Some of the initiatives were actually quite simple and extremely economic. For example, the distribution of 10 million free compact fluorescent light bulbs to homeowners in the state, at a cost of approximately US\$36 million, eliminated 1,500 megawatts of capacity, the equivalent of approximately three nuclear generating facilities. Obviously, we can see the economic benefits right there.

Ontario could rapidly embrace the era of the active consumer through the introduction of prepayment metering for all consumers. Prepayment will also act to sharpen price signals presently muted by the delayed billing system, and will also prevent the accumulation of bad consumer debt after prices rise.

Ontario stands in a position of great opportunity, as up to 80% of its current generation capacity will reach the end of its design life within the next 15 years. There's no need to refurbish or replace all of it in its current form. Instead, that 15 years could and should be used to deliver a new form of power system, a system largely built by the private sector—by industry, municipalities, communities, farm co-operatives, First Nations and individuals—and composed largely of small-scale or modular generation adjacent to demand. It would be decentralized and efficient and would be clean and economically viable. It would not be primarily the responsibility of government and would therefore not consume vast quantities of public resources badly needed for competing priorities.

The case for distributed generation can't be made strongly enough, and as we see in other jurisdictions, there are large and vast amounts of distributed generation being put into the electrical supply system through many, many sources of energy. There's not one particular piece of energy that's going to solve all of the problems. It will be a distributed and large-scale implementation.

One of the big issues right now relates to the price of electricity and trying to hold it at an artificially low level, currently at approximately five cents per kilowatt hour from the historic generating fleet. Ontarians have come to expect that this is the real price of energy, but, of course, with the \$38 billion in debt and \$125 million a month in interest charges accumulating on this debt, plus the fact that the existing historic generating fleet is going to need major refurbishment, possibly equal to the same amount of money over the next 15 years, it's clear that the real price of electricity has been heavily muted.

Part of the problem is that we've got what we would consider a top-down approach for the political control of important electrical decisions. Bill 100 is trying to propose a system where it's less politically motivated, but, unfortunately, what we're doing is simply separating the minister from the actual hard decisions by virtue of additional layers of bureaucracy. We think this will create more problems than it will solve.

Looking forward into the specifics of the program, we have no commitment to competition in generation. There is no means for determining what the true price or cost of electricity is, and there are too few players left to compete when the heritage assets are removed from the market. When there are too few players, there will be high prices, volatility and perhaps even some fraudulent operations in terms of determining what the price is.

There are also minimal targets for demand. Bill 100 perpetuates consumer passivity in the sense that we're not looking to have any hassle dumped on to the Ontario consumer. The problem is that the consumer has to become active in order to be aware of their electrical

consumption and understand the effect their lifestyle is having. Only demand reduction can make a difference quickly enough to prevent an energy crisis, as we've seen already in the California example. We need to encourage consumers to see buying electricity like buying fuel for their cars. It gives consumers responsibility and control over their own consumption.

There is very inadequate regard to renewables. Possibly the largest reason for this is simply because the government believes that you have to have a centralized model that is remotely generated power that's distributed through transmission systems. That worked fine in the early days of the generation capacity, but in actual fact now, with the new technologies in distributed generation, there is no reason why we can't have the generating sources located at the electrical loads. This would eliminate, first of all, the issue of grid instability and the potential for damage, as well as reduce electrical losses in the transmission system. We lose about 1,500 megawatts of energy through Ontario's current transmission system. By bringing generation closer to the source of consumption, this can be largely reduced.

Renewables need to be small-scale and distributed, with net metering laws and regulations which are currently lacking in Ontario. We also need to provide feed laws for renewable tariffs in order to encourage renewables to be built by the private sector. There is no reason for the province to put more money and more debt on top of what is already there. The private sector would be more than happy to build the generation capacity in the province provided they are paid a reasonable price for the energy. If we look to Germany or Denmark, for example, feed law prices have perpetuated huge gains in the renewables area. It has increased the number of jobs, and it has distributed the wealth throughout the various countries, as opposed to working with centralized locations.

There is no means for phasing out the coal plants, and trying to eliminate the coal plants by 2007 is not going to happen. I think everybody recognizes that we are just not in a position to do that. It would be far better and perhaps more politically correct now to twin coal systems with renewables by saying that we can use wind or small hydro photovoltaics and have them blend in with the production of the coal plants. As we build up additional renewable capacity, we start to reduce the coal capacity and go from that point.

There is definitely insufficient attention to the pricing signals and mechanisms. The big problem is that we're currently regulating the price from the heritage assets and there's really no reason for that. If power from the heritage assets is cheap, the private sector will not try to compete and it makes it much more difficult to get consumers to focus on demand reduction and conservation issues.

There are no mechanisms for protecting the system from the consequences of bad consumer debt. As prices go up, as they will have to, the poor and underprivileged will be in a situation where they will be faced with rising

levels of debt. Rather than simply subsidizing the cost of energy to them, we need to find demand reduction methods for them and have systems in place where they can make the decisions about energy. The Woodstock program that is using on-demand, pay-as-you-go metering is a very good example. It allows people to use the pay-as-you-go card, fill it up with as much electricity as they want to purchase and turn the lights on and off at their discretion. Nobody gets cut off, they can put power back on at any time and they don't have to pay the \$75 reconnection charge plus security deposits, which very few people can afford. Plus, the metering systems also let them see exactly what the cost of consumption is at the time of consumption rather than delayed by the three months in the billing cycle.

The Ontario Hydro stranded debt will be very difficult to pay back, without a doubt. As the \$125 million per month in interest, plus repayment of principal, continues, we will be in a situation where we have to increase prices in order to pay this debt down before it becomes exponential. The price formula must deliver full cost recovery on the debt or it will continue to accumulate through compounding until it may threaten the province's credit rating and raise the cost of all debt financing.

#### 1100

To conclude, with Bill 100 the provincial government is trying to play safe with electricity, placing its confidence in the organizing principles of the traditional centralized power system. However, change is coming for technological, environmental and, most importantly, economic reasons. The status quo, which Bill 100 seeks to reinforce, is simply not an option that can be sustained. It constitutes an attempt to hold back the tide, and as such is destined to fail. The government of Ontario would be better advised to embrace change, despite the inevitable short-term upheaval, than attempt to prevent it. The passive consumers of today are likely to find the transition uncomfortable, but that transition can only be delayed and certainly not prevented. The longer it is delayed, the more painful and prolonged the transition will be. The solution will be found in the grassroots investments in both efficiency and supply, and it will happen spontaneously when price signals reach a critical point, spurring individuals, communities and industries to take a more active responsibility for their own consumption.

**The Chair:** Thanks very much, Mr Kemp. We have about four minutes for questions on this rotation, the government caucus first.

**Mr Khalil Ramal (London-Fanshawe):** Thank you for your presentation. I was listening to it in detail. I don't see what the conflict is between your presentation and our approach to the hydro solution in this province. I listened to your presentation, element by element. Actually, this government's approach is to open it up, to listen to many speakers, including scientists, professionals, many companies, to construct a final decision in order to solve the hydro issue in this province. Can you tell me where you can see the conflict between what you said and Bill 100?

**Mr Kemp:** Our main concern is that we're really trying to turn this into a more centralized model. Having additional layers of bureaucracy and pushing the decisions from the top down, having the minister decide on the fuel supply mix and so on, is where I see the conflict coming with what I would propose.

The problem with us is that we need to see prices rise. We need to have a sharpening of the issues with the public so that they are responsible for taking on their own demand decisions and starting to embrace energy efficiency. I don't see this coming through strongly enough in the wording of the bill at this point to effect a wholesale change from the grassroots.

**Mr Ramal:** Are you asking that the people of this province pay the true costs instead of being supported by the government?

**Mr Kemp:** Absolutely.

**Mr Ramal:** And instead regulate the pricing.

**Mr Kemp:** I think so. If we look at what happened in California, it was virtually the same thing as what happened in Ontario a year or so ago. It created an enormous amount of upheaval, but as the pricing and the problems with supply became apparent, what started to happen was innovation, implementation of technologies and the least-cost and fastest approach were put into play very quickly. All of the problem was solved 100% with demand reduction and not one megawatt of additional new supply was required.

**Mr Ramal:** Do you think regulating the pricing will solve the hydro issue?

**Mr Kemp:** I don't think that alone will solve the hydro issue but it will certainly be a large part of it. We really want to deregulate the pricing and start to allow the private sector to build and be sure that the policies are there so that they're not flip-flopping back and forth. It's very difficult for the private sector to build any form of generation, clean or otherwise, if they don't know that they're going to make a return on investment over the 20-year amortization period for that capital equipment.

**The Chair:** We have about a minute and a half.

**Ms Kathleen O. Wynne (Don Valley West):** I just have a quick question. Are you making specific recommendations for amendments? Are you going to give us some specific suggestions? Because I, like Mr Ramal, don't agree that the bill seeks to reinforce the status quo. What we're trying to do is facilitate a transition to a new market and to new practices in the province. So I would very much like to see the recommendations you're making in specific terms, the sections of the bill.

**Mr Kemp:** Absolutely. You have a handout that has been provided that covers the specifics that we'd like to see happen.

**Ms Wynne:** OK. Does it go section by section with amendment suggestions?

**Mr Kemp:** Not so much amendment suggestions, no; more generalizations.

**Ms Wynne:** Just so you understand this process, we're going to be going through the bill one section at a time. So if there is language that you think needs to be

changed to reflect your concerns, it would be helpful to have some of those specific suggestions.

**Mr Kemp:** Certainly, we can do that.

**Ms Wynne:** OK. Thank you.

**The Chair:** Mrs Cansfield, the parliamentary assistant, quickly.

**Mrs Cansfield:** Thank you for your presentation. It was very thoughtful and well done. I'd like to ask if you've had an opportunity to review the regulations, because I think they identify some of the issues you have spoken about, for example, with competitiveness.

The question I have for you is really around the issue of California. I've heard that bounced back and forth a great deal. California currently has, or had, over about 200 programs dealing with conservation. The government gave it to the local distribution companies or the utilities and then actually took them back because they weren't working, and now they've given them back again. So it's pretty hard to use that as a basis of any kind of evaluation in terms of what they've accomplished.

In my comparisons—I kind of like Canadian comparisons—I wondered if instead of looking at the US, you'd maybe look at what was happening in British Columbia. I think it's probably more comparable.

**Mr Kemp:** True, although they don't have quite the upheaval in the system that we've had here. It is true that the Power Smart program in British Columbia has been an extremely popular and very positive system as well, but certainly not to the extent that California's has. There's no question that not all of the programs have worked, but I think if we look in terms of what the final outcome has been in the stability in the market right now in California, we can see that indeed the effect of all the programs averaged has been fairly successful. It would take hours to go through the point-by-point comparison, but if that's of value, it certainly could be done in a resubmission.

**The Chair:** Mr Kemp, we thank you very much for your presentation this morning.

#### TOWNSHIP OF ST CLAIR

**The Chair:** Next I would ask the mayor of the township of St Clair, Joe Dedecker, to come forward, please.

**Mr McMeekin:** Mr Chair, while His Worship is coming forward, just for clarification: I, as have other members, I'm sure, have been making notes as we go through this process—very complex, a tremendous number of ideas. I'm assuming that from the research staff and Hansard, in combination, there will be a summary of all the ideas that have been generated and that they'll be clustered to make some sense. Is that a safe assumption?

**The Chair:** Your point is well taken, Mr McMeekin. I know the clerk and the research officer will be very accommodating in order to put the material together.

**Mr McMeekin:** There have been hundreds of wonderful ideas expressed.

**The Chair:** There have been.

Welcome, Your Worship. You can start your presentation.

**Mr Joe Dedecker:** Thank you, Mr Chairman. Good morning, ladies and gentlemen. My name is Joe Dedecker. I'm the mayor of St Clair township. Unfortunately, at the last minute our county warden couldn't join us because of other business that came up, so I have with me Mr Donald Lougheed, our CAO of St Clair township.

As background information, St Clair township is directly south of Sarnia, on the beautiful St Clair River. Within our township we have the Lambton generating station, which is one of four coal-fired generating stations in Ontario. Directly across the St Clair River, in Michigan, we have three coal-fired generating stations.

Lambton generating station has four units, two of which have scrubbers and anti-NO<sub>x</sub> and SO<sub>2</sub> devices on them. The two others do not have the scrubbers and the anti-NO<sub>x</sub> devices.

Units 1 and 2 primarily meet peak and intermediate provincial electricity demand—morning, evening, summer and winter—and operate about 65% to 75% of the time. Although designed to burn high-quality sulphur coal, these units now burn higher-priced, lower-sulphur coal—less than 1% sulphur content—as part of OPG's emission reduction program. They are retrofitted with low-NO<sub>x</sub> burners, which reduce NO<sub>x</sub> emissions up to 35% and have precipitators that remove 98% of the particulates.

Units 3 and 4 have been retrofitted with emission reduction technology that reduces over 95% of SO<sub>2</sub> emissions, 80% of the NO<sub>x</sub> emissions and 98% of the particulates. These units operate to provincial electricity baseload demand and operate between 75% and 85% of the time.

#### 1110

Lambton experienced its highest historical production of 12 TWHs in 2000 and since then has produced about 10 to 12 TWHs. Low-NO<sub>x</sub> burners were installed on all units, and by 2003, selective catalytic reduction technology that removes 80% of the NO<sub>x</sub> from the flue gas was installed on units 3 and 4. The combination of the FGD and the SCRs removes about 80% of the mercury, and you can see the attached chart that we have provided for you today. Lambton generating station meets or better current Ontario and US air emission regulations and commits to meet new government regulations and emission caps. The three coal-fired stations in Michigan have, again, no scrubbers and no anti-NO<sub>x</sub> and SO<sub>2</sub> devices. From the information we have gathered, only five plants of the 1,067 coal plants in the United States have CO<sub>2</sub> removal systems.

Within our airshed there are 194 US coal-fired plants. Therefore, solving ozone and greenhouse emissions is a Great Lakes problem, not just an Ontario problem. Our four coal-fired plants are a long way in numbers from the 194 plants in the airshed.

We, the municipalities, for a number of years have had a program of conservation of utilities and, I would say,



have led the way in the field. The next step on conservation for the municipalities would be to ensure that new technologies have been introduced into the programs. As a previous presenter has indicated, the apples close to the ground have all been picked and now it is time to go to the top of the tree. We are firm believers in conservation and support the initiatives contained within this bill.

The health concerns over pollutants such as NO<sub>x</sub> and SO<sub>2</sub>, mercury and other particulate materials, we believe, are justified. Ontario has an unparalleled opportunity to reduce the province's and country's greenhouse gas emissions. However, health studies that have been quoted by other presenters have not, in our opinion, taken into account reductions with clean coal technologies. They have used old data and not considered "What if?" In order to obtain data that is open to transparent evaluation of cost, benefits and risk, the "What if?" must be answered.

We also agree with the representative of the Canadian Chemical Producers' Association when he indicated that electricity is an important component in global competitiveness. The only way to meet Ontario's energy crisis is to ensure that we have a framework that will attract new investment and not drive it away. It is important to Ontario that we stay the leader, with a reliable and competitively priced electrical system with long-term stability. In order to complete this goal, we have to have a diverse supply portfolio consisting of a broad range of fossil, hydro, nuclear and renewable energy sources.

We believe, like other presenters, that the Ontario government should set the standards of emissions and the timetable to meet the standards and allow industry to meet these standards of emissions. We believe they are the ones that can find ways to meet the goal of clean air at a responsible price for the commodity. We believe in Minister Duncan's comments at the Calgary Chamber of Commerce when he indicated, "Ontario's energy problems will only get solved by less political and more private sector investment." Let us be leaders and not followers.

Part of the solution, we believe, is not shutting down the coal-fired plants but making them meet the emissions standards that you set. You might ask, how? As I have already mentioned, in our Lambton generating station we have only two of our units with scrubbers and anti-NO<sub>x</sub> and SO<sub>2</sub> devices on them. For a number of years we have been asking Ontario Hydro to bring the other two units up to standard with the scrubbers and the anti-NO<sub>x</sub> devices. Now is the time.

It is our understanding that should these devices be placed on the other two units, our plant will come close to the emissions that would be given out by natural gas. In fact, internationally, there are a large number of clean coal technology developments underway focused on zero emissions processes. This was confirmed by Mr David Podruzny, who presented his paper to the standing committee indicating that Europe is leading the way in this field for clean coal operations.

The United States Department of Energy, as part of its Vision 21 program, projects new clean coal technologies will be available between 2010 and 2020. This program has also committed \$1 billion to a cost-shared venture to build a fossil fuel plant with zero emissions.

Many previous presenters—Ms Elwell being one—have discussed the natural gas reserves. Some have indicated that the reserves of natural gas could be from eight years to 800 years, and there seems to be a lot of confusion about the same. We know with certainty that we have over 200 years of coal reserves on this continent—not in some other place where huge tankers will bring the product to this continent, as stated by Mr Jim Schultz of Enbridge Gas Distribution. As Ms Elwell of the Sierra Legal Defence Fund said so clearly, "You wouldn't want to put all your eggs in the gas basket." We agree with this statement.

We also believe that the availability and pricing of coal is substantially more stable than natural gas over the long term. Ontario's participation in the development and deployment of clean coal technologies could influence the rate of innovations, the reduction in cost and the adoption of better technologies by neighbouring US states, reducing Great Lakes-area pollution.

We have a win-win-win situation, with an increase in economic development of new technologies that we could develop, not closing down plants and losing hundreds of jobs, we have a stable source of fuel for the long run that residents, business and government could count on at a reasonable price, and we have clean air.

Mr van Donkersgoed of the Christian Farmers Federation of Ontario indicated to the committee that the incentives which are recommended by others for saving electricity should be at the "provincial level rather than assume that we can say, 'We'll force the municipalities to deliver.' One point we would want to make is that we wouldn't want the provincial government to say, 'Municipalities, you've got to create the incentives.'"

We agree wholeheartedly with these comments. It's not up to the local municipalities to invent or handle incentives.

We have included with our presentation a paper completed and approved by the Sarnia-Lambton Economic Partnership, the Sarnia Lambton Chamber of Commerce and the township of St Clair outlining our concerns in more detail.

I want to sum up by saying:

We support the initiatives to have a central approach to conservation and the demand side of management, and therefore welcome the proposals to establish the conservation bureau, which is intended to provide leadership and planning in conservation;

Ontario needs a mix of energy sources;

The installation of clean coal technology at the coal-fired plants will make them as clean as natural gas;

Coal will remain an important green energy resource—global effort to develop clean coal technologies, zero emissions plans;

Ontario needs clean coal to remain economically competitive and to protect Ontario jobs and investments.

I want to take this time to again thank the committee for hearing our concerns. I hope that due consideration will be given to our suggestions.

**The Chair:** Mr Marchese, you're first in this rotation.

**Mr Marchese:** There are a lot of people who seem to be convinced that we have to get rid of these coal plants. You're one of the few voices, it appears, that says let's keep them. But you're also making the argument that we can get cleaner coal—and yes, that would be a little more expensive, wouldn't it?

**Mr Dedecker:** Yes.

**Mr Marchese:** You agree that that is an expensive process. But I guess you would argue that nuclear is very expensive as well, although you support nuclear.

**Mr Dedecker:** I personally and my council think we have to have a little bit of everything. But we don't see the feasibility—and I'm speaking for our council and also for our county, who have supported us in our presentation here today and on the county floor, that shutting down the coal-fired plants is a mistake.

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**Mr Marchese:** I understand that. Does radiation from nuclear worry you more than the problems that coal might be producing in the health of people, or not?

**Mr Dedecker:** I have no problem with nuclear at all. I think the technology is there nowadays, and it's going to get better as the years go along. I think that by the time we get new nuclear on stream, if we do that, the technology will be there to look after any problems. The same with coal: I think the technology is there; it just has to be investigated and put in place. I think coal would be as clean as natural gas.

**Mr Marchese:** So you would probably argue it's a mistake to try to get rid of these coal plants, given the cost of refurbishing all the nuclear plants—and there are many that have to be refurbished at incredible billions of dollars in cost, and we might not be able to have the supply necessary to provide the hydro. We should be keeping the coal plants and improving their technology to make them zero emission; otherwise, we might be making a mistake as a government? Is that what you possibly might be saying?

**Mr Dedecker:** I believe you've hit it on the head. The way I feel, coal is the main portion. To keep our coal plants viable, to keep our jobs within our communities—as I said, new technology can make coal-fired plants an important part of Ontario's hydro.

Just on a little side note, Imperial Oil built a brand new cogeneration plant for their plant in Sarnia, which I believe provided 80% of their hydro. They ran it for one week and shut it down because they can buy hydro off the grid cheaper than making their own using cogeneration with natural gas. That happened within the last four weeks.

**The Chair:** Thank you very much for your presentation.

## SIERRA CLUB OF CANADA

**The Chair:** Next, I would ask the Sierra Club of Canada, Shawn-Patrick Stensil, the director of atmosphere and energy.

Welcome, sir. Do you want to start your presentation, please?

**Mr Shawn-Patrick Stensil:** Yes, thank you. My name is Shawn-Patrick Stensil. I'm the director of atmosphere and energy for the Sierra Club of Canada. I'm on the verge of a cold, so if I squeak, please excuse me and strike it from the record.

The Sierra Club of Canada has a number of chapters across the country, including the Ontario chapter that we work very closely with. We also have a number of individual groups that work on environmental issues. We're very happy to be a democratic organization with an elected board.

As for myself, as I stated, I'm the director of atmosphere and energy. I work on energy and atmosphere issues here in Ottawa. A lot of it has to do with Kyoto, given that we are in Ottawa, but I also work a lot on nuclear power, and I'll be coming back to that in my presentation today.

The Sierra Club of Canada believes that Bill 100 is an excellent opportunity to get Ontario on the road to a more secure and sustainable electricity system. We believe, however, that we must be diligent not to repeat the mistakes of the past. This is our primary concern with Bill 100. While good, it does not address the major problems that have plagued Ontario's electricity sector for decades, and I'm sure you're all aware of many of them. I'll repeat them: the high cost of nuclear power, nuclear power's poor performance, the spiralling emissions from Ontario's coal plants, and the fact that we haven't to this day made any meaningful policy on developing and fostering renewables and our efficiency potential in the province.

In my brief, I go through a little bit of the history. Again, you've probably heard it, but it always helps to reiterate things.

Ontario is in an electricity crisis, and if we look at where this crisis is coming from, I'd like to draw it back to the nuclear question again. We're about to lose our nuclear capacity over the next 15 years, and this is due to premature aging. These plants were supposed to operate for up to 40 years, and suddenly, surprise, they're not lasting that long. So we're losing about 40% of our capacity in a very short period, and we have to be aware of that.

How did we get into this mess? Well, long before I was born, in the 1960s, there was a dream of nuclear power. Ontario hooked on to it and invested heavily in nuclear power. We built 20 plants. There are about 440 plants operating in the world now, as has been mentioned. If you think about that in a global perspective, it's pretty significant, and so have been the costs for Ontario.

What were those promises? Nuclear power would be cheap, clean, reliable and limitless. Well, I think we can

say it hasn't been cheap. The \$38-billion debt that effectively bankrupted Ontario Hydro was largely nuclear. We only need to look at the current retubing of the Pickering reactor to see that this is an ongoing problem.

Poor performance: In my brief to you, I provide a little graph that demonstrates the poor performance of Ontario's nuclear reactors. We see that up until year 10 they operate very well, and then they start to fall off. That has been the great source of problems with having to pump up the production with coal, which has pushed emissions up. So I like to refer to that as our nuclear and coal stations working in a dirty tag team in our electricity mix, and to get rid of one, we have to get rid of the other.

Finally, there's the issue of nuclear waste, which I'm sure hasn't come up a lot but is still an issue. It hasn't been discussed in public discourse lately, but how we're going to deal with this waste for hundreds of thousands of years is still unresolved. If I may quote the current government's own Minister of Northern Development and Mines, he stated that if the federal government attempts to put waste up north, he will "raise hell." I just flag this to say that this is an unresolved political issue and risk that we have to deal with. This is a minister of the Ontario government. Frankly, the promises we heard, again before I was born, that it was cheap, reliable and clean haven't paid out in any real terms.

To go back to what I brought up at the beginning, there's the latest failure of nuclear power, which is its premature aging. We're dependent on a very centralized energy system right now. Forty per cent of our electricity comes from nuclear power, and we're about to lose it. Because we're about to lose it because of technical problems, we're in a crisis. The nuclear industry and nuclear proponents have been turning this on its head, saying, "We need to build more." I think we have to step back and say, "Do we want to build more when this is what got us here in the first place?" Perhaps we need to chart a way out of this.

Going into that, I mention one thing: the dates our reactors are closing. In 2002, I contacted Ontario Power Generation and asked them for the retubing dates, because I knew this was an issue and we could see this was coming somewhere. The response I got was that it was commercially sensitive information. One thing I would like to suggest to the committee is that we need to have much more transparency on the lifespan of these reactors. It is quite a big change to go from 40 years to 25 years. If we're to have a stable transition and make effective policy, we have to know how long these things are going to last, because if one of them goes down, we have to have the backup capacity to deal with it. So that was one thing I would like to flag as well.

To put this in an international context, you've heard a number of presentations that have talked about nuclear power in the world and stated that there are 440 reactors in the world and we're on the verge of a nuclear renaissance. Let's look at the larger trends. Following Three Mile Island and Chernobyl, the world basically stopped building these reactors. There are a few being

built, mostly in Asia; I will give you that. More or less, however, what's happening in Ontario—aging—is happening around the world. By 2030, if you take the average lifespan of a reactor to be 40 years, 80% of the world's nuclear capacity will have to go off-line or risk massive reinvestments to keep it operating. So this is not an industry that's growing.

A number of forward-looking countries have decided to get out of this mess. They've seen the trends coming. One of them that I'd like to mention is Germany. In 2000, Germany passed nuclear phase-out legislation, which should be significant for Ontario, because they saw the same trend. They saw that their reactors were going to need expensive refurbishments, and they made a specific declaration that they were going to phase things out and bring new things on-line.

I'm sure the committee has heard lots about renewable energy that's being put on-line in Germany right now. Well, the two go together. This decision was made in 2000, the same year that Germany passed its renewable energy act. To quote the environment minister of Germany, "We want to start an energy policy for the future. We want to make it a seamless policy. Renewable energy sources, more energy efficiency, saving energy and phasing out nuclear energy are all elements of a responsible and sustainable energy policy."

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Since 2000, Germany has installed 14,000 megawatts of wind power as well as 100,000 solar panels. Last November it shut down its oldest nuclear plant, the Stade nuclear station, and is planning to shut the rest down over the next 15 years. I think this is an informative example for what Ontario may like to examine.

Similarly, Belgium passed legislation in 2002 to close all of its reactors by 2025.

To go back to this, one thing that struck me is that proponents are saying, "We need to rebuild all these reactors." Let's step back and imagine for a moment rebuilding all 20 reactors in the province. Imagine 20 Pickering's, and imagine the past six years where we've had to go through cost overrun after cost overrun after threat of brownout. I would just put that to the committee.

Where can we go from here? First, we need to take energy efficiency as our primary source, I guess to say. A recent study by the Pembina Institute showed that Canada could reduce its electricity by 40%. Bill 100 makes a very good proposal for the conservation bureau. However, we think the conservation bureau should be made independent. The difference between people who want to build supply and people who understand that these lights here could be a lot better and actually get rid of the need to make supply is significant. So we think that autonomy should be in the bill.

On the point of energy efficiency, I'll bring up just how we're not taking this seriously. Last week my mom came to visit and we went shopping for an efficient washer and dryer because she has to replace them. She's about to retire. She sees it as an investment in her

retirement. Energy bills are going up, she doesn't have much of a pension and she wants to get an efficient dryer. What's stopping her? Well, the price is just a little too much for her to invest upfront. Ontario used to have a rebate; we don't right now. It is just really simple things like this that the province can do to bring down demand.

We should also take renewable energy seriously. The Pembina Institute's report estimates that renewable energy could provide up to 30% of Ontario's power by 2020. Again—and this goes for conservation as well—the province should set minimum goals for the deployment of renewables. To ensure this deployment, we should also not be afraid of copying policies that work. Germany's feed law has worked and we should take that seriously. I've read past Hansards and I know a lot of people have spoken to you about that.

Ontario should also learn from Germany's example by declaring an official phase-out. We know these things are coming off-line. Let's stop meandering about whether we're going to rebuild them or not. We know when they're coming off-line. Let's figure out how we're going to replace that supply vis-à-vis new supply or efficiency and make sure the lights stay on and put people to work. Germany now has 130,000 people who work in the renewable energy sector—pretty significant.

Notably as well, Germany is one of the world's largest promoters of Kyoto and they're phasing out nuclear power. This goes against what's usually stated by nuclear proponents, that it is a Kyoto solution. I work on Kyoto here in Ottawa and nuclear power is not part of the federal plan. Why? It's too expensive, it takes too long to get up and there's not a lot of public support for it.

I think with that, that would conclude my remarks.

**The Chair:** Thanks very much, Mr Stensil. We have three minutes for questions. Mr Chudleigh, you're first on this rotation.

**Mr Chudleigh:** Thank you for your presentation. I take it that you're not in favour of nuclear power. I'm assuming that you aren't too keen on coal. How about natural gas?

**Mr Stensil:** Natural gas we view as a transitional fuel but it's something that we can get on-line quickly. It's cleaner, especially—combined heat and power, for instance, are used extensively in Europe, where you boost your efficiency from just burning the gas to actually using it to heat homes and neighbourhoods. The Netherlands produce 50% of their electricity from combined heat and power. It's difficult to name a place in Ontario where we do this. So again, there's another example we could learn from.

**Mr Chudleigh:** If coal could come in at the same cleanliness rates as natural gas, do you see that as something in the future?

**Mr Stensil:** No. Again, we have to look at this partly in the long term. What I referenced the minister from Germany saying about getting on to a sustainable energy future—Germany has set a long-term target as well with 50% renewables. What this does is, it sets up a benchmark for where we want to be as a province in 40 years,

say. It's long off, but it sets a standard of where we're going. It orientates industry.

**Mr Chudleigh:** And you see renewables as wind power and—

**Mr Stensil:** Wind power, solar, biomass; there are a lot of options out there. A lot of them are still coming in line to be economic at different levels. But Germany, as I stated, installed 100,000 solar panels in two years as part of a government program. That's 300 megawatts. It's taken us six years to try to get Pickering back on-line. Let's weigh our options here on what might be the best way to do it and develop an industry. As I stated, 130,000 people working in jobs is significant. What's more, it's not make-work projects in one area. These are jobs that are spread out in communities across the province.

**Mr Marchese:** Germany's feed law: What is that?

**Mr Stensil:** Basically, they give a different rate on top of whatever the base electricity rate is. So a wind producer will have a guaranteed price for a period of time so that they have the stability to get it on. This is also done in Texas.

**Mr Marchese:** And the renewable is different from the feed law?

**Mr Stensil:** No, it's the same. It's just different ways—

**Mr Marchese:** “And/or”; I see.

**Mr Stensil:** It's a typo, maybe.

**Mr Ramal:** Thank you for your presentation. When you mentioned that the \$30-million debt came from the nuclear stations, I would say it wasn't just for the nuclear stations refurbishing; the mismanagement at Ontario Hydro also played a big role by creating that debt and it accumulated to \$38 million.

Also, I want to tell you something. I'm not here to push nuclear stations as an alternative to produce extra hydro and renewable hydro. One of our options is nuclear. We listened to a gentleman; I think his name is Dr Jerry Cuttler. He's a scientist who has been working on nuclear energy for a long time.

**Mr Stensil:** I've met him.

**Mr Ramal:** He stated that it would cost every individual in this province \$5 per month to produce hydro. Also, the Netherlands doesn't produce 50%. It produces only 20% through windmills. So what do you think about these numbers?

**Mr Stensil:** They produce 20% through windmills, but I think I just mentioned as well combined heat and power. They have an energy mix; they're not producing it just through wind. That is something no one has ever advocated, having an energy mix of different renewable options, a good push on efficiency. I've included in the package a report by Ralph Torrie that illustrates very well the efficiency potential in the province, and from 1970 to 1998, what we got out of efficiency—his question is, “What would we do if we tried?” I think that's very important.

On the nuclear question again, a new argument is political interference, but we continue to see these cost overruns. Right now at Chalk River, north of Ottawa,

there are two experimental reactors for radioactive isotopes being built by Atomic Energy of Canada. They're over cost and over budget. This has been going on for 30 years.

From working in other provinces—again, New Brunswick has been faced with the same situation as Ontario. It has one reactor that produces 30%. When put to a public utilities commission on whether this would be a good thing to do—a separate independent commission—it said it was economically too risky to be in the public interest, something we should be wary of.

**The Chair:** Thank you very much, Mr Stensil. We appreciate your presentation.

#### INDEPENDENT ELECTRICITY MARKET OPERATOR

**The Chair:** Next we have the Independent Electricity Market Operator; Mr Goulding, the president and CEO. It was the agreement of the subcommittee that expert witnesses would have 30 minutes for their presentations, so the IMO will have 30 minutes. Any amount of the 30 minutes you don't take we'll reserve for questions. Welcome.

**Mr Dave Goulding:** Thank you very much for the opportunity to appear before this committee. I have with me this morning Bruce Campbell, who is vice-president of corporate and legal affairs at the IMO.

Our appearance here comes on the heels of the one-year anniversary of the August 14, 2003, blackout, the most severe blackout in North America's history, which as we know affected more than 50 million people in Ontario and eight states in the US. We have learned a lot in the past 12 months and as an industry across North America we've collectively taken a number of actions that leave us less prone to the occurrence of such a situation.

I'll talk a little more about that, but first I'd like to make comments around Bill 100. I will leave time to answer questions that you may have, by the way. I've also left two recent IMO publications. One deals with the 10-year outlook for supply and demand of electricity in Ontario and the other one looks at some of the ways that larger customers can better manage their cost of electricity.

**1140**

Bill 100 offers an important step in moving forward in addressing some of the issues that have surfaced in Ontario's electricity sector over the past few years. At the Independent Electricity Market Operator, we are committed to doing our part to ensure there's a successful implementation of the new electricity structure that's envisaged under Bill 100.

The IMO was created five years ago as part of the break-up of Ontario Hydro. Ontario Power Generation, as you know, was set up to run the generating plants, while the IMO's responsibilities included directing the flow of electricity across the high-voltage, province-wide network owned by Hydro One and other transmission

companies. We also were given the responsibility of managing and operating the competitive wholesale electricity market and working with neighbouring jurisdictions to manage an integrated North American electricity network.

The IMO is an independent, not-for-profit entity. We are governed by a board whose directors are appointed by the government of Ontario, our fees and licences are set by the Ontario Energy Board and, most importantly, we operate independently of all participants in the electricity market.

That independence will carry forward under Bill 100. Our new board will be composed of the CEO and 10 directors to be appointed by the Minister of Energy. If passed, Bill 100 will require that the directors must be independent and not represent generators, distributors, transmitters, retailers or, indeed, any market participant.

The independence of the board will be complemented by an advisory committee that will provide advice on policy and transitional matters, including technical ones, as may be specified. Stakeholder consultation is an important, in fact vital, part of the way we do business, so this committee will provide critical guidance as we move forward.

Our independence is key for a number of reasons. As the Minister of Energy told this committee, Ontario urgently needs new supply, transmission and demand initiatives to address the potential future shortfall. Our plants are aging, and demand continues to grow. The minister has indicated an investment of \$25 billion to \$40 billion will be required in the sector over the next 15 years.

Maintaining the independence of a system and market operator is key to investor confidence. Investors want a level playing field. They want a level playing field for their transactions and they want a level playing field for their investments. The IMO has no bias when balancing competing commercial interests of the different competing parties across a variety of operational fields and in fact operates in a transparent manner, providing the information and data that participants need to make both sound commercial and operational decisions.

The issues that have surfaced since the market was opened on May 1, 2002, have been well documented; in particular, issues around price, conservation and the need for a long-term integrated plan for Ontario's electricity supply. But there were also success stories during those years.

The wholesale market operated the way it was supposed to, particularly during tight supply-demand periods. It attracted badly needed generation not only from inside Ontario but also from outside Ontario, filling the inter-ties and prompting large customers to cut back or shift their use of electricity when prices were high. In fact, I would claim it was the signals from the wholesale electricity market that kept the lights on during those challenging times in 2002.

The structure the government has introduced with Bill 100 allows large customers and others to continue to

realize the benefits offered to them under a market pricing scheme, while at the same time, the government is moving to put long-term solutions in place to address the changes that will be needed if Ontario is to maintain a reliable, economic supply of electricity for many years to come.

I believe that the source of a good number of the problems that have bedevilled our industry has been the lack of appreciation of the true value of electricity. Provision of electricity below actual cost has bred inefficient consumption patterns and created a deficiency in energy management technologies. This has not only put pressure on the supply-demand margins but also puts pressure on price. If you don't conserve, then you lose in two ways: The price goes up, and you increase your volume.

From our point of view, the market puts a value on electricity that is more reflective of the cost to produce. The wholesale price signals when supplies are tight and can prompt customers to re-evaluate when they use electricity and why, and by lowering demand, we can then lower our supply requirements.

The market provides an environment where shifting electricity use to times of the day when demand is lower becomes more than just a good thing to do but offers real benefits to those who make the effort to change the way they use electricity.

The IMO has been working to promote demand response within the market. Already, some large volume users in the market manage their electricity and their energy use to take advantage of lower-price periods. Our emergency demand response program provides us with an important tool in managing tight system conditions, with an opportunity to have customers reduce demand when we're close to the edge. But we're not nearly close enough to maximizing the potential that demand response can have to help in maintaining a reliable and efficient system.

One of the key barriers that we found is that most customers just don't have the tools or the capabilities to offer demand response into the market. That's why we're embarking on a new program, a transitional demand response program, which is going to support investments in new technologies and acclimatize companies to think and work in more energy-efficient ways.

Other initiatives under development, such as the day-ahead market, will help customers and consumers in general better anticipate prices and adjust their consumption accordingly.

We applaud other efforts to deliver the benefits of the market to the broader consumer base, such as the government's commitment to install smart meters in homes across the province.

By maintaining the role of the market, Bill 100 retains one of the key strengths of the current system. Our wholesale market is a foundation for building a conservation culture, where electricity is used wisely and our supply requirements are tempered by our ability to manage demand. As I've said many times and in many

forums, the only thing we waste more of other than electricity is water.

Now let me address where the IMO fits in with this proposed legislation. While there is a name change for us to the Independent Electricity System Operator, or IESO, our primary roles and responsibilities around the market and system operations, and our independence from market participants, will continue. But going forward, there are other areas where our organization can and should make a difference. We have the skill sets that can help make the changes successful. We can act as a resource that both the Ontario Power Authority and the Ontario Energy Board can turn to in order to meet their new responsibilities.

In creating the new Ontario Power Authority, I would expect that there would be a desire to limit the size of the organization to ensure that resources in the new structure do not present a significant increase in the level of resources that currently exist in today's structure. Turning to the IESO for support will maximize effectiveness in the industry and reduce the need for a major increase in resources.

There will be a need for the two organizations, the OPA and the IESO, to work very closely together. Both the OPA and the IESO will have an obligation to assess system reliability going forward and to make plans and take actions to ensure that there will be adequate supply to meet Ontario's demand for electricity.

The IESO responsibilities are mainly in the shorter term, planning and managing the minute-to-minute operation of the system and looking out over a year or two years or so in order to make sure that that takes place, whereas the OPA planning window will have to mesh very tightly with the IESO time frame and will extend into the longer term.

Decisions made today will inevitably affect the viability of future plans but, equally, the plans for the future can have an impact on the present. Both organizations need to recognize that the plans and decisions they make under their own accountabilities have the potential to affect plans and decisions made by their counterpart. Longer-term actions must lead to a system that can be operated reliably in real time.

The IMO has a number of hand-offs that occur within the organization. These hand-offs can be from one function to another, but also they're between real time and short term and between short term and the longer operational horizon. These address our broad range of accountabilities around integration of the system, managing reliability, directing the operations on the power system and managing the competitive wholesale market.

Similar hand-offs will also occur between the IMO and the Ontario Power Authority, certainly in the domain of adequacy. So this reinforces the need for both of those organizations to work together. We must have a seamless organizational flow, if you like, from the long term down to the real term.

Given all this, the draft legislation does propose that the OPA have the ability to delegate any of the OPA's

powers or duties to either a committee of the board, to a panel established by the board, or to any other person or body such as the IESO.

Many of you will be familiar with the IMO's 10-year outlook, which has, over the last number of years, served as a planning tool for the industry as a whole. We will undoubtedly be discussing with the OPA how best to leverage this expertise in forecasting electricity needs and in assessing the power system. Such a step can contribute to the effectiveness of the new structure while limiting the need for new resources.

**1150**

The approach of the new RFP process that has been put into place and that the government is implementing for the 2,500 megawatts of generation and demand-side initiatives is a perfect example of the way the current IMO systems and procedures can be used around and through that RFP process to effectively integrate new resources into the Ontario electricity sector.

With respect to the Ontario Energy Board, the IESO, through its market assessment and compliance unit and the IESO's real-time visibility of the operation of participants, can continue to support the market surveillance panel, just as it does today, albeit the market surveillance panel will now be reporting to the OEB rather than the independent members of the IESO. At the same time, this market assessment and compliance unit would continue to provide operational and analytical support, as it does today, to the IESO.

Turning to demand, there is also a role for us to play in the conservation and demand management efforts.

The November 2002 decision to freeze low-volume customer electricity commodity costs at 4.3 cents per kilowatt hour not only put a halt to many plans that were being formalized to build new generation, but also took away price as an incentive for low-volume customers to conserve. The interim pricing structure, which charges a higher rate for electricity consumed over a base amount, is one step in the right direction to encourage wiser use of electricity.

While the majority of customers in Ontario will be eligible for a fixed rate, there are about 40,000 to 60,000 customers who are still paying the market price for electricity or have signed with retailers. These customers represent approximately 55% of the total demand for electricity in Ontario.

Most of these customers have a limited knowledge of the electricity market or, more importantly, the ways that are available to them even now to realize the benefits of a market-based system. Awareness and education are necessary, and the IMO is working with local distribution companies and trade associations to get these customers the information and tools they need to better manage their electricity costs.

Our Web site, which I would encourage you to visit, by the way, has information readily available, including information to help customers track price, supply and demand trends.

There are other ways the IESO can contribute. As part of our mandate, we coordinate operations with neighbouring provinces and states. Through this, we have established excellent relationships with many North American regulatory bodies such as FERC, the Federal Energy Regulatory Commission, the North American Electric Reliability Council, or NERC, and other reliability authorities. I am also, along with my peers in the US and Alberta, a member of the IRC.

Now, I should pause here. You've probably learned by now that we love acronyms in this business. The IRC is an acronym of an acronym. The IRC is the ISO-RTO Council. The ISO is the independent system operator and the RTO is the regional transmission operator.

**Mr Marchese:** You memorized it.

**Mr Goulding:** Absolutely, yes. It appears in all my nightmares. I'm trying to develop a further level of acronyms.

Basically, this is a very important body that we're a member of. What we do is look at a wide range of issues facing North America's electricity system and a lot of common issues that we have to address, ranging from operations to planning to markets to reliability to adequacy.

The reason I mention this is that Ontario cannot operate its power system in a vacuum, and neither can it develop its plans in a vacuum. Liaison with neighbouring jurisdictions is essential. The relationships that the IMO has developed can be utilized for the benefit of the province going forward. I think that's important to recognize and important to retain.

Before I conclude, let me spend just a couple of minutes looking back at the August 14, 2003, blackout. As you know by now, the blackout did not originate in Ontario, nor did any actions in Ontario contribute to its severity. When you look back, it's clear that there were a number of failures south of the border that shouldn't have happened: failures in training, failures in facilities available, failures in vegetation management, failures in accountability, failures in communication—a whole raft of failures that were sitting out there, by the way, waiting to happen at any point in time.

The good news out of this is that it put the spotlight on some of the entities that weren't operating in a proper manner and enabled us, through NERC, to address what we need to improve procedures and practices across the entire industry.

The North American Electric Reliability Council—and we were a significant part of this—has conducted 20 control area audits to ensure that the lessons that were learned are being put into practice. Those 20 audits have covered 80% of North America's electricity supply. Ontario is one of the areas audited.

Ontario, in fact, has been internationally recognized as having in place a leading structure for managing reliability, and the NERC audit confirmed that. The results of the audit demonstrated that the IMO meets or exceeds all of the standards for electricity system reliability. It concluded that the IMO personnel, facilities, tools and

training are excellent and that the IMO has a robust restoration plan that worked well during the blackout.

But despite those high marks, we haven't stood still. We have improved our communications capability, we've worked with industrial customers and others to find better ways of managing tight supplies in future, and in general we have worked with others throughout the Ontario industry to ask, what are the learning points that we got out of the blackout and the restoration?

The point I want to really stress here before I finish is that it's absolutely essential that this diligence and the processes, accountabilities and relationships that we currently have and that put us in a leadership role have to be retained through the transition to the new structure. We can't afford to drop the ball during the transition.

In closing, let me say that the IMO is committed to ensuring a smooth transition to the new structure so that all Ontario electricity customers can count on a reliable supply of electricity for many years to come.

Thank you for the opportunity to appear before this committee. I would be pleased to answer any questions.

**The Chair:** We have about 12 minutes, and in this particular rotation, the government caucus.

**Mrs Cansfield:** Before I ask my questions, could I ask you please to explain two things for the committee? Before I do that, first of all, thank you. It was an excellent presentation. I will have some other comments, but just before, could you explain spot market and day-ahead market for everybody here so that we have some understanding?

**Mr Goulding:** OK, certainly. Spot market: The way we operate the market at this point in time is by matching on an almost continuous basis the offers into the marketplace versus the bids into the marketplace. So a generator will say, "I will provide electricity at this and so price over this and such a period," let's say for an hour. What we do is look at what the demand is on the system, including any demand side that has actually said, "We're willing to pay a given price." If you don't say you're willing to pay a given price, we assume that you're willing to pay any price, because you want the electricity.

So what we do on the spot market—and we do this on a continuous basis but basically we think of it as hourly, although we dispatch every five minutes—is take all of the offers into the marketplace from generators and those who would send power across the inter-ties and we look at how much of that electricity we need in order to meet the demand side of the market. Then, starting from the cheapest, the lowest offers, which might be zero by somebody who actually wants to run and will be a price taker in the marketplace, we put the generation together in blocks of offers—it might be 100 megawatts from here, 20 from there, 500 from here, 1,000 from here—until we reach the point where we have enough electricity to meet the demand and also enough electricity so that we have a reserve margin from the generators to be able to accommodate any shortfall. That's done on a rotational basis, a continuous basis, and every hour there's a new

set of prices that will come out of that. That's the spot market.

Then, within the hour, we will actually dispatch every five minutes. So from within those offers, the demand never stays the same. It increases or decreases continuously. We have a need to continuously adjust those outputs, of the marginal plants particularly. So every five minutes we may send out a different signal that says, "OK, will you increase your output by this amount or will you decrease it by this amount? You're the marginal plant on the system." That's a continuous process in terms of matching supply and demand, and that's the spot market which operates within a day.

The day-ahead market to a great extent operates on a similar principle to the spot market, but what the day-ahead market does is start more than a day out and over the following day, a 24-hour period, takes all of those different offers, both from the supply side and the bids, if you like, from the demand side, matches them together and gives a day-ahead indication of what the prices might be, a day-ahead indication, particularly to generators and loads, of how they might actually be going to operate, so they don't get the sudden changes that are more likely in the spot market. So you get more stability, more opportunity to act further in advance in the day-ahead market.

**1200**

**Mrs Cansfield:** Thank you very much. Now my questions. I'll preface my questions with some remarks. First and foremost, I'd like to thank you for your presentation. One of the things I've always appreciated is that you're very candid and when you say you're going to do something, you do it, you follow through. I think it stands Ontario in good stead, not only in the past but in the future, that you have run a very complex organization that very few people understand and you've done it well. It's praise well deserved, and I can tell you it also comes from the United States. I participated in a forum in the Midwest, and they sang the praises of the IMO, so it's justified on both sides of the border for the work you've done.

I also appreciate that you've been able to look at your proposed role in the new legislation, how you can function and the things you can do. I think you've identified how important it is for the people to work together in the new power authority. I would be particularly interested in your thoughts around the procurement process. When I look at the type of expertise you bring to the table and the number of years you've been in this very complex industry, I think you have a great deal to offer in terms of that kind of information. I don't know if you have the opportunity now, because it is complex, but maybe in the future—those kinds of options. The same with the governing process, around those: Again, you've experienced that, and I would be interested if you could bring some of that information forward.

I guess the last thing is that I hope this committee will take the opportunity to go to the IMO in Clarkson and really look at the complexity of your organization and also have an opportunity to appreciate and value the work you do.



**The Chair:** We're trying to arrange for that. The question? We do have several minutes. I'd like to get everybody in on this rotation if we could.

**Mrs Cansfield:** You can bring them to me later or do it now.

**Mr Goulding:** We'll do that later, then.

**The Chair:** Ms Wynne.

**Ms Wynne:** Part of my question—the explanation of the day-ahead market—was answered. But I had a question about where that is. Is there a plan for the day-ahead market to be put in place? What would be the cost to do that? I'm not sure where that's at, and I've actually had questions about it in my office.

**Mr Goulding:** We've done an enormous amount and continue to do an enormous amount of stakeholding around the day-ahead markets. At this point in time, our plans are to move ahead with the day-ahead market. Quite frankly, I don't see that the day-ahead market could be introduced, because of its complexity in terms of all the systems that would need to be put in place not only at the IMO but by participants, until sometime in 2006. So it's not around the corner in terms of next week or next month.

**Ms Wynne:** And do you know if there are costs associated with day-ahead?

**Mr Goulding:** There is a cost, and we're still trying to get to the bottom of what the cost is going to be. It's certainly going to be several millions of dollars, but on the other hand, we're also looking at the significant benefits that we think we'd get out of it.

**Ms Wynne:** That's the other part of the question: What would the savings be?

**Mr Goulding:** We're trying to quantify them as much as we can, which is not a simple matter. But certainly on a qualitative basis, there would clearly be improved price stability that comes out of this for consumers. There's a great opportunity for increase in demand response, particularly with the day-ahead signals as opposed to the day at hand and, I would hope, through both of those, an increase in the inherent reliability of the power system. Those are benefits that are difficult to quantify, but in a qualified way, that's what we're seeing.

**Ms Wynne:** OK. My second question was about the transition. In your speaking notes, you went through a number of things that we had to be sure were in place or were attended to in that transition. I wasn't able to write them all down, but is there a key issue that we, as members of the government, should be paying attention to in terms of the transition to make it smooth?

**Mr Goulding:** Absolutely. I think the IMO—the IESO. Sorry, I still think of us as the entity formerly known as the IMO.

**Ms Wynne:** Well, the bill's not passed yet, so you still are.

**Mr Goulding:** That's right. I did take my lead from a pop singer.

The relationship between the IESO and the OPA is absolutely crucial. You can't afford to have plans that

don't mesh, you can't afford to have processes that are different, otherwise you'll get different results.

**Ms Wynne:** So that's the key. Thank you.

**Mr Goulding:** That's the key.

**The Chair:** I want to get Mr Chudleigh and Mr Marchese. Mr Chudleigh?

**Mr Chudleigh:** Is it key enough to ensure—why break them up? You used to be doing this yourself. Why would two bureaucracies be better than one?

**Mr Goulding:** We didn't do this ourselves, actually. What we did was produce forecasts looking out 10 years, but we had no accountability or authority to go out and actually put forward power contracts or RFPs in that particular context. This is a new responsibility being given. I guess the government must feel they need a particular focus in this area. Really that's all I can say about that.

**Mr Chudleigh:** In conservation, controlling the demand side of electricity, I've heard figures that the potential is 5% of the market and I've heard figures that it's as high as 40% of the market. Do you have any insight about what an aggressive program to conserve electricity might produce in a savings of generation?

**Mr Goulding:** First of all, you tell me what number you like and I'll tell you which expert to pay, just as in many other areas. My own opinion, for what it's worth, is that an aggressive conservation program over time could probably be up to a 10% saving in demand. But I think that's got to be aggressive, and like most curves, there's a bit of a point where it becomes more and more expensive. I think 10% is realistic, but it has to be sustained, it really has to be driven home. People have short memories sometimes.

**Mr Chudleigh:** Thank you very much.

**Mr Marchese:** I have a few questions. You were talking about how 40% of consumers have a capped or blended price and that 60% would pay the market value.

**Mr Goulding:** It's closer to 50-50, but in terms of demand, yes.

**Mr Marchese:** Is it fair to say that the spot market—the wholesale market—and the retail market influence what the other 40% pay?

**Mr Goulding:** Certainly. Going forward, in fact, you'll see a number of elements in there. First of all, you'll see some smoothing due to the regulated prices given to some of the Ontario Power Generation assets. Secondly, going forward you'll see some of the participants still able to go out there and use the spot market as well as going to their own contracting. And then you've got the Ontario Energy Board, which will be providing regulated prices which one presumes will be set infrequently but which will be intended to capture the true value. Now, going forward, what I expect to see is a whole combination of different tools, from forwards to contracting to spot market. My expectation is that over time, the spot market's main value is as a balancing market to recognize short-term changes that will always happen in this business, either due to demand increase—hot days—or equipment failures, and the spot market will

still be the best tool available for ensuring that the plant that should run on a day is the plant that does run on a day because it's the most efficient, no matter what the contracts look like.

**The Chair:** Gentlemen, I want to thank you for your very informative presentation. We're going to set up a tour on September 16.

**Mr Goulding:** Thank you. I look forward to seeing you.

**The Chair:** The committee stands adjourned. Lunch is an hour; we'll be back about 5 or 10 after 1.

*The committee recessed from 1208 to 1305.*

### LARGE LDC COALITION

**The Chair:** I now ask that the Large LDC Coalition come forward: Toronto Hydro, Hydro Ottawa, Hamilton Hydro, Enersource Hydro and PowerStream Inc. Gunars Ceksters, the president and CEO, will make the presentation. Welcome, gentlemen.

**Mr Gunars Ceksters:** Thank you, Mr Chairman. Good afternoon, everybody. I think there were handouts provided to all. Thank you for providing our coalition of large local distribution companies this opportunity to appear before the standing committee on social policy.

**The Chair:** Being an expert witness, you have 30 minutes. Any time you don't use will be left over for questions.

**Mr Ceksters:** Thank you. My name is Gunars Ceksters. I am the president and CEO of Enersource Corp, which is the parent company of Enersource Hydro Mississauga, serving the city of Mississauga. I am speaking before you today not solely on behalf of our company but also as a spokesperson with respect to certain commonly held views of the six largest municipally owned utilities in Ontario.

With me here today are Dave O'Brien, president and CEO of Toronto Hydro; Brian Bentz, president and CEO of PowerStream, which is the amalgamated group of utilities for Markham, Vaughan and Richmond Hill; Art Leitch of Hamilton Hydro; and Michael Angemeer, president and CEO of Veridian Connections. Unfortunately, Ron Stewart from Hydro Ottawa wasn't able to attend this afternoon. He sends his regrets.

Together, our six utilities serve over 1.5 million customers in Ontario, in the largest urban centres of the province, with a combined peak customer load of 10,700 megawatts and a combined customer base of 1.5 million customers.

Each of us within this coalition represents the front line of service to customers within our respective service territories. Considering this relationship, we commend the province for adopting the positions it has taken on several issues that are very important to both our customers and our companies.

We have divided our joint presentation today into those initiatives within Bill 100 that are supported by the coalition and then certain specific areas of concern that

we wish to bring forward. Let me walk you through some of these items.

One of those initiatives capturing our full support is the identified need expressed by the government and in Bill 100 for stabilized yet reality-based pricing for smaller customers. Customers have made it clear to us that they dislike volatile pricing. As a province we learned that lesson very well during the hot summer of 2002, when demand was very high and capacity was very short, resulting in wildly varying commodity pricing to the residential consumer that was directly exposed to spot market pricing. We believe that stabilized pricing can provide predictability while recovering the true cost of electricity over a reasonable period of time.

Bill 100 establishes a reasonable approach to keep electricity costs transparent and within the electricity system.

#### 1310

Stabilized pricing can also include predictable time-of-use pricing, which can incent conservation and demand response. In our view, better price response will be achieved through the use of smart meters, as announced by the government.

A second initiative supported by our coalition is the explicit responsibility for long-term planning and system adequacy that would be assigned to the new Ontario Power Authority under Bill 100.

While some might contend otherwise, it is our view that the establishment of the OPA does not displace competition, nor does it create an unaccountable bureaucracy. In fact, we believe this body will supplement the competitive market with an identifiable and responsible agent. In our current situation, with considerable need for investment in new generation supply and significant untapped potential that exists to curb electricity demand through effective conservation, we support the formation of the OPA and the goal of the province to develop an integrated power system plan that appropriately coordinates supply-side and demand-side resources.

We do recommend, however, that the OPA should be a transitional authority. Suggested indicators of the appropriate time for this market transition modifying powers assigned to the OPA are, in our view: when there is the prospect of a liquid market in the province, with multiple buyers and sellers—we need more suppliers of power rather than just having OPG and Bruce Power; when rates are in place to foster commercially sustainable investments in conservation and supply; when smart meters are available to assist consumers in responding to market prices; and finally, when there is a healthy balance established between supply and demand.

At that point in time, we would suggest that the OPA be removed from its operating authority and another mechanism developed.

A third initiative supported by the coalition is the bill's improved focus on demand-side and distributed generation resources.

We think Bill 100 will encourage development of demand-side resources through better identification of

roles and responsibilities, coordinated through the new conservation bureau.

We fully endorse the province's assignment of demand-side management—DSM—to local distribution companies like ourselves. We welcome the opportunity created by Bill 100 to develop alternative and renewable energy sources.

We will undertake customer communication programs with the expectation, of course, of prompt cost recovery. Amongst our coalition alone, I should note that we have collectively spent approximately \$100 million in market preparations, with much still to be recovered, related to the various stages of restructuring of the electricity market that has occurred to date.

We support and anticipate the development of a voluntary, co-operative relationship with the OPA and the conservation bureau. In this new relationship, we recommend that a flexible framework be established for LDC implementation of demand-side management programs and the expansion of distributed generation through utilities and utility affiliates.

Institutional rationalization is another welcome initiative. We endorse the mandate of the OEB as an independent regulator to provide industry stability needed to attract capital investment. We also endorse the re-configuration of responsibilities between the IESO and the OEB. This will integrate regulation of the wholesale and retail segments of the industry. Certain seams issues experienced in the past around the interface of the wholesale and retail markets should also be mitigated under the new configuration.

Our coalition also supports the need for industry representation on stakeholder advisory bodies for the OPA and IESO, as spelled out in Bill 100. The IESO and OPA will have a very significant influence on the business of utilities. Conversely, utility activities will be important to both the IESO and the OPA. There will be an ongoing need for communication and co-operation between LDCs and each of these entities. We therefore recommend that regulations related to Bill 100 should further provide reserved representation for the utility sector on the advisory bodies of both the OPA and IESO.

Getting to some specific concerns as mentioned earlier, we would like to raise attention to the partial supply obligations that are found in section 29.1 of the bill. If the intent of partial supply is to foster the development of green energy, we think it would be more cost-effective for the OPA to include green energy in its portfolio, and the OEB should include the costs of green energy in the regulated supply mix. We suggest this, as the cost and time for utilities to adapt their billing systems will be very significant. Also, given the history and the current status of regulatory assets, utilities would require prompt recovery of implementation costs associated with changing their billing systems.

A second focus of concern of our coalition is the application of the Municipal Freedom of Information and Protection of Privacy Act, covered in subsection 142(7). First of all, we support open and transparent disclosure of

senior management salaries, director compensation and related third party transaction costs. Utilities incorporated under the Ontario Business Corporations Act should be distinguished, in our view, from municipalities. We think these LDCs should be subject to disclosure requirements that substantially mirror those of investor-owned utilities under the Ontario Securities Commission, meeting public reporting requirements for compensation, benefits and related items consistent with other public reporting entities. Competitive affiliates of LDCs should not be subject to MFIPPA. The legislation as written puts us in conflict with the affiliate relationship code from the OEB. The obligations would place LDC affiliates at a prohibitive competitive disadvantage with private sector companies.

A third specific concern that we would raise is the issue of cost recovery of DSM expenditures related to section 29.1 and to be further defined in regulation. While we completely support the province's conservation and energy efficiency goals, we believe that if we are to make rapid progress on achievement of these goals, mechanisms must be developed to support the LDC in this regard. This must provide ongoing funding post-2005 for DSM undertaken by utilities and assurances of prompt and full-cost recovery by utilities for current and future programs. Mechanisms must also ensure that utilities are held harmless from DSM-related revenue erosion. Finally, these mechanisms must provide meaningful, cost-effective incentives for utility DSM and distributed generation initiatives.

In summary, we support many aspects of Bill 100. This bill is an important framework helping to achieve stable electricity prices, responsibility for long-term planning, improved focus on energy efficiency and distributed generation, industry representation on OPA and IESO advisory committees and co-operative relationships with the conservation bureau.

Three areas of concern that we specifically recommend be given further consideration relate to the partial supply arrangement in section 29.1, the application of MFIPPA to commercial companies, and the importance to our coalition of full-cost recovery of DSM expenditures.

On behalf of the coalition, thank you once again for this opportunity to present our views.

**The Chair:** Thank you very much. You have taken about 10 minutes for your presentation, which will leave 20 minutes for questions, and in this particular round in rotation, Mr Marchese, you're first, followed by the government and then Mr Chudleigh.

**Mr Marchese:** A couple of questions. I think you all support the smart meters that the province is talking about. That would involve considerable cost, obviously, to someone, because the province talked about installing about 800,000 by 2007. Some people say the cost might be 300 bucks or 400 bucks, and someone would have to pay that. In your view, if people had to individually pay for that at that cost, do you think, first of all, they would do it, and secondly, given what is possible in terms of

what could be shifted off peak hours, are there enough savings for that individual to merit that kind of an expenditure? So there are two questions.

1320

**Mr Ceksters:** There are two questions there, and I'll start with the first one. In my view and in the view of most of the participants on the panel here, the rate increase that we'll be getting in 2005 would be used for conservation purposes, and that could be used for the cost of the implementation of smart meters.

In relation to how much can be saved, that's still up for review, but I would suggest that, as Dave Goulding said at 11:30, an objective of about a 10% reduction in capacity usage in the province is achievable. A lot of that is achievable through residential consumers and the use of smart meters to assist them in planning their consumption of power.

**Mr Marchese:** What is it that you anticipate people might shift to that would get to this 10%, and is that based on any research or just from thinking about how people might be able to shift power usage from whenever it is to whenever? What would they be shifting from, and to what, and do we have the studies that say it would be a 10% reduction?

**Mr Ceksters:** There have been studies done in the States, particularly in California, where they had a huge reduction over a 10-year period, that has shown no marketable increase in power use over the last 10-year period. That was directly attributable to conservation on behalf of the users of power in the state of California.

I'm sorry. What was the second part of your question?

**Mr Marchese:** I'm just wondering what it is that people might do at 10 o'clock in the evening, other than washing their full load.

**Mr Ceksters:** Shift load, basically: put timers on their washers; put timers on their dishwashers.

**Mr Marchese:** Dishwashers and washing clothing—

**Mr Ceksters:** And put controllable thermostats in the home to use less power during peak times. There are some simple things that consumers can do to really have an impact on the province's load requirements.

**Mr Marchese:** A 10% reduction. Interesting. I didn't think it was that high, based on what I've been looking at or hearing.

There's another question that some people have raised. I know you haven't talked about it and I'm not sure it fits into your world view, but people have talked about GATS and NAFTA in terms of the possible implications they would have to Ontarians in general. Once you get into a contract with NAFTA, unless you've got some protections, whatever protections you can fit into a NAFTA agreement around issues of energy—and GATS is a little more complicated in terms of what's going to go down the pipe, because a number of countries in Europe and the US are interested in putting hydro into that mix. Have people reflected upon the implications of that to the objectives of governments in terms of how you get caught into a contract that is irreversible? As a suggestion, if you can get more money in the States, and

energy gets delivered there because they need it and you can get a higher price, we can't say, "No, because we've got to serve our people first." Is that a consideration for you guys at all?

**Mr Ceksters:** That is a concern of ours. However, this group has not addressed it in any way at this point. We don't have the answer for that.

**Mr Marchese:** I'm worried the government is not addressing it, either. Although there was a question the other day in Windsor and the minister said, "Oh, yes, we looked at that," or "We have a legal opinion," I'm not convinced he's got a legal opinion. I'm not convinced that the government has reviewed the implications. So it is of interest to me that people who are thinking about it begin to put on paper, reflecting on the long-term effects of this, what those implications are and what we should be doing with the federal government to say, "We've got some serious concerns around this." I guess I'm urging this group to reflect on that, to spend some time on legal opinions to see whether or not it serves your interests and the larger objectives.

**Mr Ceksters:** We'll take that under advisement.

**Mr Marchese:** You're in favour of opening up the market to the broader sector in terms of getting into the creation of energy and the distribution?

**Mr Ceksters:** Yes, definitely. We need some private sector investment.

**Mr Marchese:** Do you really believe—because there's some doubt about this—and is it your sense that people will find it attractive to come and invest in Ontario in new power generation?

**Mr Ceksters:** Right now there's an RFP on the street, and I'm sure we'll be seeing very shortly what kind of response we get. But my feeling is that there will be quite a strong response.

**Mr Marchese:** My sense is that unless people can be guaranteed that they're going to get a certain price for this risk investment—because if there's no serious shortage, you might not get a whole lot of people saying, "Yes, this is the right time to come in." So while there are requests, we'll get a good sense of whether or not there might be some interest, but it's possible we might not get the high level of interest we're looking for. If that's the case, what do we then do? Enron, I understand, is probably not interested in coming here to Ontario, because they're staying home. But if that's the case, what do we do?

**Mr Ceksters:** Well, I think at that point the OPA and the government would have to review the RFP and see what needs to be modified to allow further responses to come in. What are the problems that are deterring the responses?

**Mr Marchese:** In your view, if government has to give a lot more in terms of guaranteeing certain contracts, certain prices, is that, in a competitive market, a good thing for a government to do?

**Mr Ceksters:** I think in this particular market it's something that will have to be required to be done in order for investment to come into the province. We've

seen private shareholders telling us they want some guarantee over a longer term before they start spending \$100 million putting plants in the province.

**Mr Marchese:** But if it's a truly competitive market, isn't it wise for these people to simply say, "Yes, we're coming in. We're going to bid into the market and hope for the best," because that's really part of the competitive system, isn't it?

**Mr Ceksters:** Unfortunately, the market is still in its development stages, so what is the market? The legislation hasn't been passed, so the investors are saying, "Put a stake in the ground, let us work to it."

**Mr Marchese:** Right. Other comments?

**The Chair:** Could you please just identify yourself for Hansard, sir?

**Mr Dave O'Brien:** My name is Dave O'Brien, and I'm with Toronto Hydro.

With respect to the marketplace, I'm not sure we, as a group, should comment on government policy per se, but let me say the marketplace is now made up of a combination of generators. There are the baseload or heritage assets that belong to OPG that, I suspect, the citizens of this province would be loath not to use and incorporate into the system because of the fact that they're there and they're reasonably priced. There is also, in addition to that, a need for additional generation. As long as there's a balance between the use of the heritage baseload assets and the new generation—and perhaps that is a role for the OPA, to blend the pricing—you will probably get an attractive enough price for the consumer in the long run. I think the marketplace right now is really a combination of those two, and you can't separate those two.

**Mr Marchese:** But I was thinking, if we don't get an interest—

**Mr O'Brien:** You will get an interest. I can tell you there's an interest out there already. In a former life, I was the city manager of Mississauga, and in our city there are gas generation facilities right now that are ready to go, fully approved EAs through the municipal planning process ready to go. All they have to do is put the RFP on the table and they will apply.

**Mr Marchese:** I guess my question is, they're ready to go as long as they can be guaranteed a certain price, no?

**Mr O'Brien:** They have to recover their investment.

**Mr Marchese:** And make some money. There's some risk here, and so the risk is usually what costs us, the Ontario consumer, a little more, right?

**Mr O'Brien:** Well, you're not going to get generation in this province without paying for it. The new generation in this province is going to cost more than the heritage assets, which were built a long, long time ago.

**Mr Marchese:** Well, you see, my concern is, it's going to cost us, no matter what, whether the Ontario Power Authority, which can't bid, by the way—this is a concern of mine; it cannot bid. You're saying, "Don't worry. We'll have a whole lot of private people there ready and interested and we'll build new generation because they're interested."

**Mr O'Brien:** That's my personal view of that.

**Mr Marchese:** I hear you; I'm just debating with you. I'm worried that if there is not enough interest unless governments give enough incentive for them to get in—and the Ontario Power Authority can't, by this bill, get into the game—how do we deal with the fact that nuclear plants need to be refurbished—very costly; coal plants are being wiped out, so to speak; and very little new generation is coming in? At some point in the next couple of years, we have serious problems, right? Because even if people come in to build, they may decide to pull out, they may not build in time, and all of that produces a great deal of uncertainty that worries me a little bit.

**Mr O'Brien:** Well, I can't comment on whether or not nuclear plants should be rebuilt or not rebuilt; that's the decision of government. All I can say is, from my experience, there will be private sector investment in this province, unquestionably.

**Mr Brian Bentz:** Ultimately, I think all the market participants are looking for is predictability of price and some creditworthy party—

**The Chair:** Sir, your name, just for Hansard. Could you just identify yourself.

**Mr Bentz:** It's Brian Bentz from PowerStream. I think investors are anxious to get into this marketplace, but they want stability, they want predictability of price and they want a creditworthy counterpart. If they can have those things, then I think the market will find an equilibrium. Where that equilibrium is, relative to today's prices, we don't know. You have to let the market forces evolve and compete.

1330

**Mr Marchese:** The spot market: Isn't that the unpredictability of the system? Isn't that what you're getting into when you get into the spot market?

**Mr Bentz:** You are, but I think what the bill contemplates is a hybrid approach to pricing, which I think is a good intermediary step to evolving to a fully competitive marketplace. It's looking at regulated prices where there was no competition in the past. We've seen this with the market power mitigation agreement, where we've had subsidized pricing, effectively, in the past, but the energy consumers haven't seen that. That's where we're seeing the difference between the wholesale and retail prices accumulating as a debt that is being borne by the OEFC, but it's not transparent to consumers, and it should be. So I think this legislation takes us in that direction, and I think it's a good first step in that regard.

**The Chair:** Quick questions from the government side. I also want to work in Mr Chudleigh at the same time, because this is an important presentation.

**Mr McMeekin:** Mr Chair, part of my question was answered around the reference to the hybrid approach. The government's trying to find some balance here. There's an old saying that good judgment is based on experience, and experience invariably on bad judgment. So we damn well better get it right this time, because the

consequences of error are, in my opinion, just too dramatic.

That having been said, I want to say for the record that I don't think every company out there is an Enron either. It always gets lifted up as the example of the evil company that went off the rails, and woe is us. I think there are a lot of very good companies that have a lot to do.

I have also said for the record that my constituents aren't lining up and saying, "Please, Mr MPP, spend another \$10 billion a year and just add it to my taxes." So if we can find a way to shift some of the risk and risk management, I think that's part of the government's approach too.

I have, really, a kind of philosophical question I want to ask around the meters. Since the goal of demand-side metering is ultimately conservation, someone suggested to me in my riding the other day that when they're installed, there ought to be a differential price, that those large consumers that are swallowing all kinds of power maybe aren't as conscious of conservation, versus the little old lady. How would you feel about the government having a differential price, with those large consumers paying a much larger share of the installation costs for meters and, conversely, those who are conserving paying less?

**Mr O'Brien:** I think for the smart metering program to be successful, there's probably going to have to be some price differentiation. I would concur with that.

**Mr McMeekin:** Good. So you'd support that.

**Mr O'Brien:** Yes, I would concur with that. We'd all be in that same vein. If you look at—and I don't want to talk in a partisan context here in any way, shape or form, but when the price was frozen, there was no incentive at all. None. For whatever reason that was done, that's fine. I'm not debating why it was done. I'm talking about the issue itself. When the price was unfrozen and allowed to move, there was not a lot of push back that I found.

Now, the mitigating circumstance in that was the blackout. Had the blackout not happened, would there have been some reaction to an increase? I don't know. But the fact of the matter is, the blackout was there. When the prices were lifted, people said, "Yes, I think I can probably afford to pay a little more, as long as it's going to stabilize the system."

Now, that's the issue. As that price increases and the cost of power increases, the public, I believe, personally, will accept it, as long as there is an alternative. The alternatives are methods that the government can put in place to allow them to conserve energy, and thus reduce the price. As long as they're done in combination, I think you've probably got a pretty good opportunity for the public.

**Mr McMeekin:** So, on balance, we're on track. Thanks.

**The Chair:** Ms Wynne, if you could keep the question short and, for the expert witnesses, the answers short. I really want to give everybody an opportunity, and Mr Chudleigh is waiting patiently.

**Ms Wynne:** I will only ask one of my two questions, and I'll just comment. The first one: I just want to acknowledge the billing issue. It has been raised with us before, and I think it's something we're going to have to keep talking about, the confusion that could ensue.

My other question is about the dissolution of the OPA. You talked about it as a transitional body. When I look at its objects, they seem to be things that are going to need to be done for a long time, in terms of long-term forecasting. I know there's a provision in the bill for the body to be dissolved. You said that you thought there should be another mechanism set up once it was dissolved. Could you just talk about that for a moment?

**Mr Ceksters:** Certainly from our perspective we feel that there are other mechanisms in the market that could exist. LDCs in collaboration—creating load-serving entities—could pick up some of the requirements that the OPA is doing right now; in other words, pick up some of the risk that the government is taking—slice it up, provide it to the marketplace and have the market pick up some of that risk.

**Ms Wynne:** So you're seeing the LDCs doing that forecasting function? Is that what you're saying?

**Mr Ceksters:** We have to provide the input material to the OPA or the IMO now. We have to do it right now. We provide the inputs.

**Ms Wynne:** So it just wouldn't be a centralized function; it would be a more decentralized function. Again, I guess that's something we're going to have to keep talking about.

**Mr Ceksters:** It would fit nicely into distributed generation in the long term as well.

**The Chair:** Mrs Cansfield, very quickly.

**Mrs Cansfield:** Very quickly. Thank you very much for your presentation. I would ask that you put in writing, or find a mechanism to get them to whomever necessary, the regulations as you might see them evolving, so that you have some input into the three areas you have identified. I think that's really critical. You've identified the areas. Now I'm asking, if you have some solutions, would you put them in writing and make sure that this committee gets them or get them directly to the ministry?

**The Chair:** I believe they're going to do it. Mr Chudleigh, please.

**Mr Chudleigh:** Many of you have very large industries in your cities. Have any of you worked with those industries or talked to those industries about cogeneration opportunities?

**Mr Ceksters:** Yes, we have.

**Mr Chudleigh:** Is there anything forthcoming out of that?

**Mr Art Leitch:** I'm Art Leitch. I'm with Hamilton Hydro. We're working with the steel industry in Hamilton to develop a possible project for cogeneration using waste heat from the steel process to not only generate electricity but to generate hot water. We have a district heating system in Hamilton now, and this would be an expansion of that system. So there are some real

opportunities there for cogeneration using waste energy from industrial processes.

**Mr Chudleigh:** What about conservation authorities and some of the dams they have? Do any of them have enough head to be practical for cogeneration or to generate?

**Mr Leitch:** It's very small. It's not significant.

**Mr O'Brien:** The only additional energy you'll get out of the river system now is the basic run-of-river flow, the normal flow. The damming system is almost complete.

On behalf of Toronto, we, as a utility, are probably going to aggregate a lot of the demand-side management issues, with respect to the submission we have to make to the OEB with respect to our next rate increase. So we will be working with our industries on cogeneration, the whole demand response program that's going to be part of that. That's probably going to be quite common across utilities in Ontario.

**The Chair:** Thank you very much, gentlemen, for a very informative and thoughtful presentation.

#### ENVIROCENTRE

**The Chair:** Next I'd like to call forward Envirocentre and Dana Silk, general manager.

Good afternoon, sir. You may proceed.

**Dr Dana Silk:** My name is Dana Silk. I'm the general manager of EnviroCentre. Mr Chair, MPPs, ladies and gentlemen, I'm actually going to skip the introduction of EnviroCentre—it's on the first page; you can read it—but I will say that I have 12 people working for me on residential energy efficiency in Ottawa. I believe that is probably the largest team of people—certainly in Ottawa—working on residential energy efficiency in the field and probably a larger team than any LDC in Ontario. And that's a problem.

I'm going to address some of the obstacles we have faced in the city of Ottawa over the last five or six years in trying to improve residential energy efficiency. One of them is a question of perspective.

**1340**

Several months ago, a Globe and Mail editorial noted that nuclear power provides about 45% of the energy used in Ontario. Eyebrows should be rising about that. Installed nuclear capacity in Ontario could generate about 45% of Ontario's electricity, but certainly not its energy. Currently, nuclear power generates about 35% of Ontario's electricity, but because electricity accounts for only about 21% of Ontario's total energy budget, nuclear power really currently provides only about 7% of Ontario's total energy consumption. Somebody needs to tell the editors at the Globe and Mail that 7% is a far cry from 45%.

I'm saying that because we need to put this in perspective. We need to keep in perspective the desirability and the importance of our centralized electricity production system, including the grid. Under successive governments, what is essentially an old-school approach,

one that hasn't changed for decades, has landed us with a \$38-billion debt, and that's just the debt we recognize. Worse still, practically all of our eggs have been put in this basket over the last 40 years and the basket has become frayed. It's fragile and it's highly vulnerable, as we learned last summer. Let me make it clear that we don't need a bigger basket. We need to fix the basket that we've got, but we need now to invest in many smaller, more robust baskets spread across the province.

In this age of increasing global inequity and strife, we can't rely on security forces to protect our electricity grid. We've got to improve both the reliability and the resilience of our electricity system, not just the grid. The quickest, cheapest and most equitable way to do so is to focus on conservation and decentralized sources like cogeneration, for which there is enormous potential in Ontario, and for which very little action has been taken. That's followed by renewable energy sources. Among other things, this will require shifting our use of electricity away from wasteful applications, like space heating, to ensure that we always have enough electricity to run the basic services we need in Ontario: hospitals, telecommunications, water treatment plants and refrigeration. That's what we need to do.

When I was executive director of the Conservation Council of New Brunswick, I made a presentation to the full cabinet which included four recommendations to reduce the demand for electricity, which is a very important issue: Invert the rate structure; surcharge for peak load consumption; restrict the use of electric heating; and increase total interruptible power.

I'm pleased to see that one of those recommendations was implemented earlier this year by the government of Ontario, and I look forward to the introduction of smart meters to pave the way for the second recommendation. My only regret is that it has taken almost 30 years for any action to be taken on my recommendations, and the government of New Brunswick still hasn't acted.

**Lifeline rate:** As you should know—this is the standing committee on social policy—low-income households should never have to choose between paying their electricity bill and paying for food and shelter. Unfortunately, they cannot unplug the beer fridge in the basement to save electricity, because it is still in the kitchen. Bill 100 needs to legislate the new lifeline rate for the first 750 kilowatt hours per month to ensure that low-income households do not suffer unduly from increasing rates.

**Full-cost pricing:** There is no doubt that prices for electricity in Ontario must increase significantly over the next few years, and by "significantly," I'm talking about doubling. Even if we were to double electricity rates, people in Ontario would still be paying less than what most people in France are currently paying and far less than what people in Hawaii are currently paying. Of course, it will be much easier to do this in the early years of a mandate rather than toward the end of a mandate of any particular government, as we learned a couple of years ago.

That's why the inclining rate structure, which is now in effect, also needs to be legislated in Bill 100. The last

thing the Ontario electricity sector needs is another government that changes its mind because of political pressure. When your constituents complain to you about electricity rates going up, you have to bear in mind that the most recent Stats Canada survey of household spending clearly shows that the average household is not spending more on electricity; it's spending 25% more on cell phones, 31% more on satellite TV, 18% more on gambling and 19% more on tobacco. So don't be bullied into keeping electricity rates below their true cost.

Bill 100 unfortunately still favours increased supply and does not provide an adequate foundation or direction for major investments in electricity conservation and renewable energy sources.

The explanatory note is quite revealing in this regard. It contradicts the commitments of the minister and the Premier to create a culture of conservation by explaining that the purpose of the bill is to "promote the expansion of electricity supply and capacity." In fact, the purpose of the bill is to ensure "adequacy and reliability," as correctly stated in the bill. On the other hand, the explanatory note notes that the enactment of one section will ensure that participants, over time, will "pay the true cost of electricity," but this crucial phrase is dropped from the actual legislation.

The same section of the bill requires the OPA to "ensure that Ontario Hydro's debt is repaid," but says it only has to "encourage" conservation, "facilitate" load management and "promote" cleaner energy sources.

Given the institutional momentum and conflicting interests of the OPA, Bill 100 is doomed to fail if it does not legislate the paradigm shift that is needed to achieve a conservation culture, not simply at OPA but throughout Ontario society. Bill 100 should mandate OPA and the OEB to require conservation, to pursue load management, and to achieve specified levels of renewable energy sources by certain dates. You can choose your own verbs, but they have to be better than "encourage."

Bill 100 should also address, in fact redress, the current imbalance between inefficient, centralized generating plants and more efficient, decentralized sources, including conservation.

Both the task and the position of the conservation bureau should also be strengthened. It should be required to do much more than simply "provide leadership"; it should be required to deliver results. To do so, it needs to be strategically placed within the OPA or, perhaps better, established as an independent agency.

Finally, Bill 100 and amendments to the OEB Act, which it includes, need to do more than simply "permit" the promotion of energy conservation; they need to incent or at least require it by legislating the lifeline rates I referred to earlier, by legislating the inclining rate structure, which is so important to drive the market in the right way, including time-of-day rates—there's no sense having smart meters if you don't have time-of-day rates. It's just a waste of time. We also have to prohibit bulk metering of residential and commercial clients.

**The Chair:** Thank you very much. We have about five minutes left. On this round, Mr Chudleigh, you're first.

**Mr Chudleigh:** I have no questions.

**The Chair:** Mr Marchese, please.

**Mr Marchese:** If we were to require that conservation be part of anything anyone does, how do we do that for the private sector, which is obviously what the government wants more of? I mean, Ted reminds us constantly that he has constituents out there who worry about the bills. Either way, whether you've got a private sector or the Ontario Power Authority building, someone has to pay. What incentive does the private sector have to conserve, and how would we do that with them?

**Dr Silk:** Are you talking about industry?

**Mr Marchese:** Industry, private sector; yes.

**Dr Silk:** First of all, you don't really have to worry too much about industry. Industry has made enormous gains in productivity in Ontario related to electricity consumption over the last five to 10 years because industry, despite what has been happening in Ontario, knows they're going to have to invest, and they have been investing, in more efficient uses of energy, notably electricity.

**1350**

What industry needs is a predictable, long-term policy. Industry cannot react to the flip-flops on electricity pricing in Ontario. Industry needs to be driven by knowing that the costs for electricity really are going to be the true costs, that they are going to go up and you're not going to backtrack.

**Mr Marchese:** Right. You raise two different issues. They are automatically efficient. Therefore, we don't have to worry about them doing any conservation. You use the word "efficient."

**Dr Silk:** I didn't quite say that, but—

**Mr Marchese:** But you said they're efficient. Therefore, I'm assuming that—

**Dr Silk:** They're more efficient, much more efficient, than they used to be.

**Mr Marchese:** Right, and because they're efficient, much more than they used to be, therefore, conservation is really not an issue for them.

**Dr Silk:** It is an issue. It's an issue that you have to worry less about because most large industries—except this hotel chain, which is using incandescent lights up here—have full-time maintenance staff, engineers, who are costing—

**Mr Marchese:** I hear you, but I'm saying—it's Dana Silk?

**Dr Silk:** Yes.

**Mr Marchese:** We have to worry less about them, but we still need to worry about them. You've just raised the issue of this bill as an example. So how do we convince them, or require them, to do conservation in their own industries?

**Dr Silk:** You have to legislate stable price increases in electricity, and you've got to legislate it so that when



your constituents start complaining, you can't change your mind. You've got to legislate.

**Mr Marchese:** All right. I think your answer to my question, which I'm not grasping, is that if they have a predictability of price, then somehow conservation will happen. Is that what you're saying?

**Dr Silk:** One of the reasons why industry is much more efficient these days in terms of its consumption of electricity is because major industries are already investing, have invested, in cogeneration. They are using and they're recycling their waste products, and they're generating electricity. That's happening. It is not happening in the commercial and residential fields.

**Mr Marchese:** With respect to a conservation culture and conservation in general, what specific suggestions, again, do you recommend for individual society or governments to engage in so that we are actually going to save a whole lot of energy through the use of whatever it is the people should be doing? I think you might have mentioned one or two, but do you have a list of suggestions, other than smart meters?

**Dr Silk:** Sure. There are all sorts of suggestions. In fact, the province of Ontario has produced a pretty good book. It's a little unfortunate that it's talking about conserving energy when really the intent of this book is to help people conserve electricity. We've got to be careful here of what we're talking about. Are we talking about energy or are we talking about electricity? We're dealing with \$50 billion, even more, of perhaps capital investment, \$38 billion of debt, and we still haven't figured out, and the Globe and Mail hasn't figured out, what we're talking about.

If we're talking about electricity, there are many, many things, but very few of these will work in an effective way unless you've got the price signals there.

**Mr Marchese:** Dana, just in relation to the question, you pointed to that booklet, but they're very modest proposals, what this government is recommending vis-à-vis conservation. Would you not agree that it's very modest, what they're proposing?

**Dr Silk:** No. In fact, the inclining rate structure is an historic action for a government or utility in Canada. I believe we are now the only province in Canada that has an inclining rate structure. It's historic. The lifeline rate, I believe, also is historic. It is fundamental. That's why you have to legislate it so that you can't back out of it, because you will be under enormous pressure when the electricity rates begin to creep up to their true cost.

**Mr Marchese:** Thank you.

**The Chair:** We have a minute left, 30 seconds for Mr McNeely and Donna Cansfield, the PA.

**Mr Phil McNeely (Ottawa-Orléans):** Dana, thank you very much for that presentation. It was excellent. I was very interested in your work at the city, of course. When I was there as a councillor, I was on your board.

The former city of Ottawa, when they came into the amalgamated city, had a better buildings program, and its intent was to lower greenhouse gas production, but it ties also into energy conservation and what we're talking

about today. This program was disbanded by the new city in 2001, and Chuck Wilson, who was with it, left.

I'm just wondering—that has a big impact on greenhouse gas emissions. I think it was identified by the federal government as having the biggest impact of all your contributors, and also would have some impact on energy. How do we get the cities back into that program that SCM has been promoting? How do we get them into it in a bigger way, in both producing better houses—because we're producing houses that need refits—and get the commercial, industrial and residential stock in? How do we do that?

**The Chair:** Quickly. Less than a minute.

**Dr Silk:** One minute? Well, we can't do it in less than a minute.

We do it primarily through institutional changes, the directions to the OEB that have already worked. The better buildings program was a result of the OEB doing DSM on the gas side. It's beginning to do that on the electricity side. We need to incent Hydro Ottawa, because every dollar they save in electricity conservation, they lose, and that's why they can't invest in it.

**The Chair:** The PA, Mrs Cansfield, quickly.

**Mrs Cansfield:** David, you identified throughout your presentation a number of areas where things could be improved. Rather than in the bill, it sounds like they would be in the regulations; for example, the principles by which the conservation bureau would work or the things that it could do. Could you put that in writing in terms of how you see that might be more enabling, so that we could present it to the ministry staff for the regulation portion of how they establish the conservation bureau in particular?

**Dr Silk:** Sure.

**Mrs Cansfield:** I appreciate that. Thank you.

**The Chair:** Thank you very much.

#### CENTRE FOR ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

**The Chair:** I'd like to welcome the Honourable Charles Caccia. Welcome, sir. I know you've just completed 26 years as a member of the House of Commons, and a very distinguished record.

**Mr Charles Caccia:** Thirty-six.

**The Chair:** Thirty-six. Sorry; 1968, right? There we go.

**Interjection:** Even more distinguished.

**The Chair:** Even more distinguished. Mr Adams says hello to you.

**Mr Caccia:** Thank you. Let me briefly thank you, Mr Chairman and members of the committee, for this opportunity to appear before you, to congratulate you for holding meetings on beautiful days in the summer, which requires a major sacrifice, and also to say that anything that deals with energy bills requires the wisdom of Solomon to arrive at a satisfactory conclusion. It's a very complex issue. I'm sure you will have that wisdom guiding you in the end and that the study of Bill 100 will

be a very rewarding one, as it was for me to read the bill as it is in the present form.

There's no doubt it is a good framework and it is a good start in the right direction. The amendments that I would submit for your consideration are outlined in the brief that has been distributed, I understand, and they are based on certain premises, which are also outlined on page 1 of the brief I have prepared for you.

The first amendment deals with subsection 1(d), in which I propose some wording that would aim at establishing a timetable and a target for renewables. I understand there are many other organizations that have made the same point, proposing similar percentages, so there is no need to elaborate too much on that point; you must have heard it before.

The second amendment deals with the question of protecting low-income people in Ontario from the desirable and necessary increases in future rates. Here, before you look at an amendment, you may want to see the model set up for refunds for people below a certain income across the country by the GST system. Maybe the GST offers a model that can be adopted in refunding the cost of any payments for electricity by Ontarians at low incomes. I would call those payments social shock absorbers. They're necessary, though, considering the trend in the rising cost of fuels which generate electricity.

The third amendment deals with subsection 1(i). That is wording that would give a signal to the renewables industry that the government is supportive, and therefore introduces for the renewable energy industry certain incentives that are necessary in order to reach the 25% level that is proposed in the first amendment I have submitted for your consideration and to reach by 2020 a 25% level of renewables.

Evidently, the industry has been given insufficient positive signals, and that is not only in the case of Ontario but also in the case of the government of Canada.

#### 1400

Finally, I am submitting for your consideration a new subsection, 1(k), that would make it mandatory to price electricity at the retail level to include the cost of decommissioning all the plants and the safe disposition of the waste generated by such plants. This is a very controversial item because, as you must have already heard, the nuclear industry is claiming that this cost is included. As far as my experience goes, those costs are only paper entries, that fund does not exist in reality, and therefore it is an issue that will cause a tremendous amount of research if you want to carry it out in order to establish what is really the fact. I have been unable over the years to establish the existence of that fund in reality.

You may also want to look at the way that bills are submitted to the consumer. I have here bills by Hydro Ottawa and Toronto Hydro. If you read them carefully, it is a major challenge to discover what the cost per kilowatt hour is. It is actually an impossible challenge to meet. Hydro-Québec instead produces bills which give the consumer at least the courtesy of informing him or her that there is an amount for the first 30 kilowatt hours

per day at 0.49 and then above that lifeline, so to speak, then the cost jumps to 0.62, and it is embedded in the bill itself. But Ontario retailers have a tremendous skill in wording their bills in a manner such that nobody knows what exactly they're charging.

Before opening it up for questions, Mr Chairman, I would like to bring some publications to your attention and that of the committee.

Might I say that energy and electricity are part of the same coin that deals with the issue of Kyoto. Ontario can, and might want to, play a major role in the reduction of greenhouse gas emissions at the rate perhaps of 40%, as it has been traditionally. I don't know what the plans are, but certainly in your deliberations Kyoto probably looms very strongly.

The item that struck me most in reading this bill was the fact that the bill is the product of a culture of supply and that we are having enormous difficulties as a society in moving from supply to demand. That is proven also by the text of PowerShift, Toronto Hydro's latest newsletter, summer 2004. The first sentence of the newsletter begins with the phrase, "Ontario faces a real energy supply challenge." Why not a demand challenge at the same time, and perhaps more a demand challenge than a supply challenge? I suspect that for you, politically, this will be the most difficult item, in the end, to resolve, as to which way Ontario should go.

As to publications, and to conclude, may I bring to your attention the existence of a study by the International Energy Agency, which produced Electricity End-Use Efficiency, where on page 19 there is a reference to the fact that "the capacity for additional savings may be on the order of 10% to 20% over a period of about 20 years or more. If a portion of this potential could be achieved, the anticipated growth in total electricity demand might be reduced." This is an observation that is made throughout the OECD countries.

Another publication, in this case by the OECD itself, is entitled Energy: The Next Fifty Years. It has a passage that I would like to draw to your attention. It's on page 13 mainly, the passage concerning oil reserves. According to at least the OECD, to which we belong, the recoverable oil stocks, even if they were to be coming on-stream, the mid-depletion point for oil would be about 2018 or 2019. So we are rapidly approaching a point when the cost of oil as a source for the production of electricity, where it is used, is going to climb very rapidly.

In the case of housing and the construction of housing, you may want to look at the statistics related to the construction of R-2000 certified houses. Our figures are only until 1995, but the statistics are not very encouraging. The statistics related to house builders trained in R-2000 standards are also not very positive. You may also want to look at the statistics in Ontario, at least, related to the average thermal energy requirements of houses.

I also bring to your attention the fact that Peat, Marwick and Stevenson conducted a study, The Eco-

nomically Attractive Potential for Energy Efficiency Gains in Canada, 10 years ago. Since then, the same group might have produced something that may be useful in your deliberations before starting clause-by-clause.

Finally, there is a publication that attracted my attention. It was a study done in 1989, the Ontario Nuclear Cost Inquiry, which I think has another name in political jargon; it was the Brooks and Bowers report. On page 8, in its conclusion, it informs that their committee, the select committee, “requested that treasury discuss any scenarios in which Hydro’s borrowing could adversely affect the government’s financing options.” You may want to have a look at that as well in dealing with clause 13, I believe, of the proposed bill.

Thank you very much for this brief opportunity. I wish you well.

**The Chair:** Thank you very much, Mr Caccia. We have about two minutes for questions. The government side starts this time. Any questions for Mr Caccia? No questions. Mr Chudleigh, would you have—

**Mr Chudleigh:** Yes, just a comment that the electricity bill that Ontario produced, I would agree with you, is very difficult to read, but I want you to know we brought it in for the purpose of clarity. So it’s an excellent example of never letting a committee do anything. Thank you very much for your presentation, sir. It was very good.

**The Chair:** We still have one minute. Mr Marchese.

**Mr Marchese:** I appreciate your recommendation around how we help low-income consumers, because that’s a concern to many of us. At the moment, we estimate the government is spending one dollar to help low-income people for every \$20 extra they are paying. We heard other speakers before you who indicated prices need to go up, and at least the previous speaker said we need to protect those individuals who are of low income. I’m profoundly worried, given the current way we’re helping low-income people. If we’ve got to jack up the prices one way or the other, I’m not totally convinced the support is going to be there for low-income people. So I was thinking the members might be speaking to your suggestion here, and I hope they will take that into account.

**Mr Caccia:** Well, the previous speaker, Dr Silk, if I understood him correctly, made reference to the fact that, actually, of the percentage of total expenditures in the household, electricity expenditures have lagged behind the increases in expenditures related to other items in the average family, which, I thought, was a very valid observation. But the fact is that we, as a society, consider electricity as being a free good, a limitless good, and therefore it’s only a matter of supply. While, this may have been true in the 1970s, when Ontario Hydro was advertising more and more consumption and was urging everybody to consume—you remember those ads, I’m sure—now we have entered a completely different phase and electricity is no longer that good or that easy. The fact is that energy is an insatiable monster and it will never be fed sufficiently. So we, as a species walking on

this ground, have to decide where to draw the line and how, and the sooner we do it the better because we have this large issue ahead of us, the implementation of Kyoto, which in part depends on electricity decisions.

**The Chair:** Thank you very much, sir. A very thoughtful presentation.

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#### PUBLIC INTEREST ADVOCACY CENTRE

**The Chair:** I’d now ask the Public Interest Advocacy Centre to come forward: Michael Janigan, the executive director. Welcome, sir.

**Mr Michael Janigan:** I would first like to thank the Chair and the members of the social policy committee for affording us an opportunity to address the committee on our concerns associated with the Electricity Restructuring Act of 2004.

The Public Interest Advocacy Centre is a non-profit organization based in Ottawa that provides legal and research services on behalf of consumer interests, and in particular vulnerable consumer interests, concerning the provision of important public services. Since 1976, we have been particularly active in the fields of telecommunications and energy.

PIAC has been a frequent intervener, generally on behalf of low-income or fixed-income groups in proceedings before the Ontario Energy Board, with respect to rates and policies for natural gas, local distribution companies and the periodic review of the restructured electricity industry. We also publish extensive reports in this area on issues associated with the restructured electricity markets, and many are accessed through our Web site. The Web site address has been included in the speaking notes that I have distributed.

As I’ve indicated, rather than attempt to survey the great forest of issues of importance that are associated with this act, we would like to try to concentrate on several trees within that forest that are of particular concern to our organization and our representation on the board.

The first issue is associated with fair and predictable prices. Section 1(f) of Bill 100 states that one of the objects is to protect the interest of consumers with respect to prices and the adequacy, reliability and quality of service.

If the current price cap is lifted, then the standard supply plan prices could be higher if the average cost of power from the generating resources is more than 4.7 cents a kilowatt hour. Although volatility may be less than in the past, there could be a significant price shock and resulting undesirable socio-economic impacts and real hardship for low- and fixed-income electricity users. While it is ultimately important to have prices align with costs, the OEB must be allowed the flexibility to ensure that the initial price of OPG’s regulated generation is not set above the current capped level and a transition to full pricing should be facilitated by reducing the return component of the price or other means. If this is not

done, then the OPA may need to have the financial resources to smooth the transition to a market-related regulated price.

The second issue is the extent to which only the costs beyond OPG's control are to be passed through, and the extent that use of variance/deferral accounts should be allowed. The overall goal must be to create consumer confidence in the level and stability of the regulated standard supply option based on OPG's regulated assets. The previous pre-price-cap spot price pass-through mechanism was unacceptable from a consumer standpoint.

It also goes without saying that distributors should not be allowed a mark-up or return and allowed only reasonable costs of administering the standard supply plan. As best as we can determine, there is no explicit provision in the bill or in the draft regulations in this regard. We note that the investor-owned gas utilities are not allowed a return on the system gas supply equivalent of the standard supply plan.

The second aspect we'd like to address is maintaining consumer choice. The standard supply option must result in a standard supply plan option that is market-based, just as for natural gas system supply. The availability of a pool of regulated generation resources by OPG should lead to reduced price volatility relative to natural gas. However, the price must not be higher as a trade-off for achieving lower price volatility.

There will be pressure from participants in the retail competitive market to create restrictions in the name of competition that are aimed at creating an unfavourable price differential between standard supply and the market price, and other features that will differentiate standard supply from retail competitive alternatives in a negative fashion.

We saw this before in 2000 in relation to standard supply. Retailers, including affiliates of regulated utilities, lobbied the OEB in the standard supply hearing to allow only a spot price pass-through price, rather than the longer-term contracted supply. The result, predictably, was extreme price volatility when the retail market finally opened in 2002 in a tight supply environment.

PIAC's position is that maintaining consumer choice requires maintaining standard supply as a stable, competitively priced option. Many fixed- and low-income consumers prefer to contract with their utility for energy and do not want to sign up for longer-term arrangements with marketers, regardless of incentives and sales pressure to do so. The OEB must be vigilant to prevent erosion of the attractiveness of the standard supply option.

The next area is providing DSM or demand-reduction solutions. Section 1(b) of Bill 100 states that an object is "to encourage electricity conservation and the efficient use of electricity in a manner consistent with the policies of the government of Ontario."

Section 39 allows for the OPA and distributors to provide services related to electricity conservation load management or the use of cleaner energy sources. The distinction between supply-side enhancement, SSE, and

demand-side management, DSM, is that the latter are to be delivered directly by the distribution utilities and the costs recovered from ratepayers.

This places considerable onus on the OEB to ensure that cost-effective DSM is delivered and that ratepayers benefit directly. On behalf of VECC, PIAC has had ongoing battles to ensure that gas DSM programs are cost-effective and benefit low- and fixed-income consumers. While the emphasis by environmental groups is on broader societal goals by means of DSM, we tend to advocate for cost-effective measures that result in real bill reductions for consumers. In addition, we do not support incentives other than lost distribution revenue adjustments. For us, there is no good rationale for the current shared savings mechanism that the board has allowed for one of the two major gas utilities.

We note that the board has issued its preliminary guidelines for distributor DSM programs. We hope that these are just that: preliminary in nature. We have major concerns about the lack of market potential studies such as those Ontario Hydro conducted in the 1980s before launching its DSM programs; the lack of avoided-cost studies; clear methodology for screening of DSM programs; portfolio management; cost allocation; and lost revenue adjustment mechanisms.

This approach could be contrasted with that adopted so far in the Power Smart programs in other Canadian jurisdictions such as BC and Manitoba. These programs include tried and true conservation measures. In addition, the programs are vetted in consultations with stakeholders and the cost-effectiveness reviewed in rate cases. That type of review may admittedly be a much taller order in Ontario, given the number of utilities involved. However, without a rigorous coordinated approach to program design and definition, we could have a boon-doggle of major proportions.

The other disturbing aspect of this plan is not only that it is not clear who is in charge, but also that there is no indication of a process to work with stakeholders to ensure that Ontario's electricity DSM programs will be cost-effective and will achieve the goals of both consumers and government.

This comment leads to my final topic, the new approach that the OEB is taking to stakeholder participation. For over 20 years, the Ontario Energy Board has maintained a policy that encouraged informed public participation and ensured that the board had the benefit of the best information from the stakeholders so that it could determine rules, policies and rates in accordance with its statutory mandate. The mechanism by which this was accomplished was a system of cost awards, wherein an intervening stakeholder was allowed to obtain reimbursement for the costs of intervention when that intervention was responsible and contributed to the board's understanding of the issues of the case. The cost award payment was made by utility energy providers and recovered in rates as part of regulatory costs.

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For rate-paying customers, the cost award system has been spectacularly successful. Notwithstanding the fact

that the OEB allowed recovery by both non-profit and commercial interveners, our studies have shown that interventions funded by cost awards have cost ratepayers less than 2% of the total monetary amount removed from rates—that is, saved by ratepayers—by the board in the course of the funded interventions. Our friends at the Canadian Consumer Council have calculated this cost at about \$1 per year per utility customer.

Other policy-oriented proceedings concerning such matters as utility affiliate purchasing rules, the provision of standard electricity supply or rules for expansion of gas transportation systems have also been enhanced by the use of cost awards. While positive results in the latter proceedings are somewhat more difficult to measure, it is important to note that the most successful elements of electricity restructuring to date have involved proceedings where there has actually been informed public participation. When policy was set by behind-the-scenes manoeuvring or by a coterie of heavy thinkers and well-heeled players in the know, the practicalities of real-world considerations intruded with often controversial results.

We are accordingly alarmed to see that the OEB seems to be marching resolutely down a road consistent with the board becoming a combination of energy czar and exclusive boutique, rather than an independent, open and knowledgeable arbiter of rules and rates. Despite demanding and obtaining substantial monetary increases to their own budget, the board has decreed that important OEB proceedings to determine rules, codes, policies and design frameworks for the energy industry are being conducted outside the normal processes that provide for informed participation by way of the reimbursement of participant costs. Equally distressing is the fact that the OEB has publicly expressed a preference for proceedings that are not bound by precedent and the facts before it. We cannot conceive how this seeming return to the operating style of governance of a bygone era is going to help ordinary consumers.

In fairness, the board has suggested that it has found a new technical objection, based upon statutory interpretation of the provisions of the OEB Act, that prevents the historical use of cost awards to enable public participation in proceedings that are convened to discuss and set policy in a generic fashion for the energy industry.

Currently, subsection 30(1) provides that “The board may order a person to pay all or part of another person’s costs in a proceeding.” The OEB currently interprets that subsection 19(2) is a barrier to making such an award in a generic proceeding in which an order may not be forthcoming. That section is reproduced in my notes: “The board shall make any determination in a proceeding by order.”

The board, in contrast to its previous position, now maintains that, because the policy-making proceedings across the industry do not result in an order, its cost award provisions are inapplicable. We disagree, and note that section 20 seems to negate that interpretation. However, we do not have the resources to litigate on that point.

We note that the amendment to subsection 30(1) proposed in this bill adds the words, “or process,” to the conclusion of subsection 30(1). Unfortunately, “process” is not defined, and we are concerned with the possibility of other limiting interpretations. Accordingly, we would request that the committee give consideration to the amendment of section 30 such that it would adopt the language of section 20 to read as follows: “The board may order a person to pay all or part of another person’s costs in a proceeding or in all matters before the board under this or any other act.” Someone suggested to me, just prior to this meeting, that this may also be accomplished by incorporating that definition into the definition of process at the beginning.

While this amendment will defeat the form of the technical objections to resourced public participation, it may do nothing to curb the new-found appetite for a method of operation that is, perhaps unknowingly, geared first and foremost to reconciling the interests of major industry players with chosen policy elites. The discontinuance of the necessity to have your theories and rules tested in an open hearing with participants playing on a level playing field may be superficially attractive and possess some veneer of efficiency, but it will be ultimately ruinous, economically and politically, if the guardians of the public interest get it wrong, bereft of the meaningful participation of all stakeholder groups.

I apologize for taking up all of my time, Mr Chair.

**The Chair:** Mr Marchese, you’re up on this rotation. You have about 30 seconds for a quick question.

**Mr Marchese:** Thank you very much for your presentation.

#### CLIMATE ACTION NETWORK

**The Chair:** Next we have the Climate Action Network, Mr Bennett, executive director. You have 15 minutes, and any time you don’t use we’ll reserve for questions.

**Mr John Bennett:** My name is John Bennett. I’m the executive director of the Climate Action Network of Canada. As the name implies, we’re concerned about climate change.

A little bit of background on the network: We’ve been around for about 15 years. We have about 100 members, representing all of the provinces and two of the territories, and a good half-dozen of those members are from Ontario.

I’ll try to keep my presentation as brief as possible. I’ll confine it to three areas: conservation and efficiency, renewables, and nuclear power.

I’d just like to add that the network supports the submission by the Greenpeace Foundation, which is a member of our organization, with the specific line-by-line comments that were made.

On conservation and efficiency: We think the Ontario government’s announcement to close the coal-fired power plants was probably the most significant and positive announcement by any government anywhere in

terms of reducing greenhouse gases. But we have been in this debate for 15 years and we'll hold our applause until we actually see it done. Unfortunately, what we haven't seen is any kind of connection between the announcement to close those plants and the federal government's climate change plan for Canada in which it makes an offer through its partnership fund to assist provinces in achieving the goal of reducing greenhouse gas emissions. There are huge opportunities here which we haven't seen discussed at all. There has been an agreement in principle signed between the province and the federal government but there's nothing specific on how the federal government could help to finance this closing of the coal plants, which in turn could also be used to help develop conservation and efficiency programs.

What we have to do in Ontario is put conservation and efficiency at the top of the list instead of the bottom. I know it's more attractive and more interesting to cut ribbons in front of power plants and windmills, but it's more cost-effective and more environmentally protective to not use the electricity in the first place.

There were a few questions earlier and I might just interject them at this point: How do we deal with commercial and industrial operators to encourage them to conserve and be efficient? Why is it that the building code allowed this room to use at least 20 100-watt incandescent bulbs where they could be replaced with compact fluorescents that use about one fifth of the power? Why isn't that in the building code? Why are there thousands of houses under construction in this province today that don't meet the R-2000 standard when that standard was developed in the 1980s? These are very simple things that all three of the parties represented here today had the opportunity to put into law in the last 15 years and failed to do so.

In terms of the closing of the coal plants, we can actually achieve about a 40-megaton reduction in greenhouse gases in Ontario that is not in the federal plan. There are 60 megatons missing in the federal plan and now we have 40 tons more from Ontario. This province should be looking to the federal government to assist in that closing.

In terms of residential use, I have some direct personal experience. I ran the green community initiative in Belleville in the mid-1990s and our numbers indicated, with over 1,500 green home visits, that we were reducing the average electricity use of a residential homeowner by about 10% just by having a nice chat with them and showing them where the opportunities were in their house. I also had the experience of having that program discarded by the provincial government, without thought or regard to the implications of what it would do.

As we talk now about creating a conservation bureau, I am reminded that at the same time the green initiative program was cast aside, we shut down the conservation branch of the Ministry of Environment and Energy. What's the difference between the conservation branch and the new conservation bureau? This bureau should become an independent agency. It should not have to

report to the engineers who are talking about building new plants and setting prices for electricity. It should be on its own, have the responsibility to generate the huge savings that are possible. I would challenge this committee to give me \$900 million and then shoot a gun; let's have a race to see who can come up with 500 megawatts of savings first, and how much money will be left over in my pot compared with what's going to be left over in the OPG's?

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On renewables, the bill does not give enough clarity that this is something we want to have happen. It's the same stuff we've been hearing for the last 10 years: "Gee, isn't this a good idea? We'd like very much for it to happen. Maybe if we're nice about it, it'll just occur." That's not the way it's going to happen. What we need is a clear policy that we're going to make it happen. To do that, I would suggest that Ontario adapt the German feed-in law or alternative tariff, as we heard earlier today. This is the simplest and most beautiful system ever devised for getting new supply on-line quickly and efficiently and at very low cost. It works like this: The province sits down with the wind industry and says, "How much will it cost for you to build windmills and supply electricity over 15 years and guarantee the price?" Then anyone who builds a windmill plugs it into the grid and we have electricity—the same for solar, the same for biomass, the same for all the other reasonable renewables. That way, we get it all happening. We don't go through a cumbersome system of making bids to the province and applying to the federal government so we can get the wind incentive program if we're the first guys across the line.

I'd like to conclude on nuclear power. Nuclear power's not a solution to climate change. In fact, in Ontario it's a cause of climate change and has been for the last 20 years. Because of the nature of nuclear power, it requires very high peaking capacity from fossil fuels, and when nuclear power fails, you have to burn those fossil fuels to supply the baseload that you thought you were just going to use on peak. What we don't see in Bill 100 is any end to the favouritism that the Ontario government continues to show toward nuclear power. Why wasn't Ontario Power Generation required to go through an RFP program that was complicated and put forward a proposal and go through public scrutiny before the Ontario government gave it the go-ahead to spend \$900 million of our money, knowing full well that we're not talking \$900 million but we're talking a lot more than that? There's a favouritism in this system that's built in. It was built in and tilted every situation in the last 25 years since I first picked up a placard and marched against building another nuclear power plant. It's always tilted in favour of nuclear power despite the facts, despite the reality.

In conclusion, I'd just like to say make conservation and efficiency your main mode of supply. Create an independent conservation authority to do that. Adapt the German model to Ontario so we can actually get renewables being deployed at the rate of one windmill a

day, as they're being deployed in Germany today—one every day; 50,000 people working on wind alone in Germany, and five years ago there were a couple of hundred—because they have one law that says, “If you build it, we'll buy it.” That's what we need to do in Ontario. Of course, the last point is, forget about nuclear power. Decide to phase it out and just quietly close down those plants as they become extinct, because they're going to do it on you whether you pay more money or not.

Thank you very much. I appreciate the opportunity.

**The Chair:** We have about six minutes for questions. On this round, Mr Chudleigh, you're first.

**Mr Chudleigh:** I have no questions.

**The Chair:** Mr Marchese.

**Mr Marchese:** We had a doctor the other day in Windsor who talked about nuclear and talked, of course, about how safe and clean it is. He even said that down the line, whenever that would be—I don't know if it's a thousand years from now or whatever—people would want that radiated material, that they would want to buy it, in fact. So there are a number of people who obviously believe this, that it's safe and clean and that you don't have to worry about how to decommission it or, presumably, store it and worry about how safe it is. There's a whole body of people thinking it's the cheapest and safest. Obviously, you don't agree, right?

**Mr Bennett:** Well, \$38 billion, half of them broken down, cost overruns every time we've tried to build one. I don't know where he gets his logic, but I'm glad I'm no longer the lunatic fringe. If he wants the 40,000 tonnes of nuclear waste in Ontario, give it to him. And yes, we could sell it. I'm sure the North Koreans would love to buy it and the Iranians would love to buy it. We've already equipped the Indians and the Pakistanis with the technology to build bombs. Both those countries are recipients of CANDU reactors from Canada. This is a technology that doesn't meet any of the tests. You have to take some risks to generate electricity or energy. Why take risks you don't need to? If you can get it from a windmill or a solar panel, why would you build a nuclear power plant?

**Mr Marchese:** John, obviously people are saying that nuclear creates 40% of our energy—I think it was disputed earlier by somebody else; I forget—and gas generation or hydroelectric is another 8%, 9%, 10%. If we are not going to refurbish these nuclear plants and we close down the coal plants, you're saying that through an aggressive conservation system—what the government is offering at the moment, in my view, is very modest, but you're saying that with a good, aggressive conservation system and incentives for renewable resources, we shouldn't have a problem, that we could do it.

**Mr Bennett:** Climate Action Network commissioned a report called *Kyoto and Beyond* in 2002. The conclusion of that report is that by 2030, if we decide to do it, Canada could meet its electricity needs with existing hydraulic power, if we make that the goal and we actually work toward it. Now, there would still be some

little bits here and there of other forms. But generally speaking, we waste half the electricity we generate, and that is the source of supply that we should be seeking most earnestly at this point in time. Certainly, if we look at California and other places, we see that the return is much quicker through efficiency and conservation, and it's long-term. One little law that says all commercial buildings have to use compact fluorescent light bulbs and we save a fortune in power and we don't have to build another plant to supply it. That's the answer, not wasting any more billions of dollars on something that's going to break down five years from now.

**The Chair:** Ms Wynne, a question? You've got one minute.

**Ms Wynne:** So you're advocating legislation over attitudinal shift. I mean, you see legislation as the way to shift attitudes.

**Mr Bennett:** I don't distinguish them. I think the public expects that when they go to buy something, it should be based on standards of producing and that it's efficient, that it's the least polluting possible. We should provide the laws that do that for them. It shouldn't be up to every individual to be an energy-calculating machine every time they make a decision to purchase something. You should be able to go and buy a car that's efficient. When you go in to buy a fridge or a stove, you should select based only on the colour and the shape, not on the energy efficiency of it.

**Ms Wynne:** So there should be that framework and that clarity in place.

**Mr Bennett:** In fact, Ontario has the capacity to do that and did some of the groundwork already and has a number of regulations for efficient appliances. But it needs to go further and it needs to carry it into the buildings and require them to be installed.

**Ms Wynne:** A lot of what you're talking about and the vision of the society you're talking about is, as you suggested at the beginning, where we want to go. I think the speed at which you'd like to get there is perhaps not possible. I mean, we're talking about taking out the coal plants. We can't take out the nuclear plants at the same time, because the lights won't go on.

**Mr Bennett:** I believe I said to phase them out as they retire themselves. The question is, if you look especially at the Pickering rebuild, you can argue that it was mismanagement, which I've heard today, or you could say, “Look at the situation. You're in a panic to do it.” You decide this week, “This is what we have to do,” and you think, “Oh, I missed something.” When you read the Manley report, what it says to me is that the technology drove the mistakes of management, not the other way around. They had to get it done, it was urgent to fix it, and they went about it in the way they thought was best, and each of the 13 times the board said, “OK, we'll pay more,” it was because they had to; they had no choice. It reminds me of Pete Seeger on the Smothers Brothers show back in 1968. He said, “We were knee-deep in the Big Muddy and the damn fool said to push on.” Well, once you're halfway across the river, is it better to go forward or to go back?

**Ms Wynne:** We're going to try to go forward. Thank you very much.

**The Chair:** Thank you very much, Mr Bennett.

**Mr Bennett:** You're welcome.

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#### STEPHEN THOMAS

**The Chair:** I now ask Mr Thomas to come forward. Mr Thomas, you presented to us in Windsor on Monday. I would ask that you provide us today with any new information that you might have relating to Bill 100, and that was the agreement of this committee this morning when we allowed you to come back for a second time. You can start your presentation, sir.

**Mr Stephen Thomas:** First, let me thank you again for the opportunity to present to you. Let me reiterate my willingness to meet with anybody, any interested parties in the rest of the week, while I'm here.

I don't want to go over the ground on the timing of the closure of the coal plants again. You've heard plenty of evidence on that and you will have formed your own opinions. Also, on whether the private sector can be relied on to come in on time, again, you will have heard plenty of evidence. I'd just like to reiterate and expand a little bit on four points that I made.

The first one is on GATS and NAFTA. I think the important thing to say is that nobody goes into a reform expecting it to fail. The California authorities did not reform their industry expecting it to fail. So the reality is that these reforms have proved risky, and I think the committee needs to seek clarification on GATS and NAFTA to make sure that it's aware of the implications under these agreements of any system it proposes and to ensure that there is an orderly exit strategy, should the reforms fail. If you're going to be locked into a failed system, then I think that would be the worst of all worlds.

The second point I'd like to make is on the nuclear power plants. Again I'd like to stress the urgency of making decisions and making sure the resources are available to carry out those decisions. One decision could obviously be the closure of these plants. That would be a very difficult thing to carry out, given the lead time to replace that very large amount of capacity.

If the decision is to refurbish the Pickering B plant, we've heard in the press this week that it is showing signs that decisions will be needed soon on its refurbishment. The Bruce B plant is a similar age and that will also need decisions soon. The two Bruce A units, which are out of commission, will also need decisions on their refurbishment, and we have two units of Pickering A which are down and which will also need decisions to be taken.

A refurbishment is a complex task. You will need to be sure that the skills, resources and materials to carry out that task in an orderly fashion over the six or seven years that it's going to take to go through the whole process of closing those plants are in place. Otherwise, it won't just be the problem of replacing the coal plants; you'll have the problem of replacing nuclear plants.

The third point I'd like to make is on retail competition. I know you heard some testimony this morning on prepayment meters. I didn't go into much detail on that in my paper, but prepayment meters are an area where the UK has more experience than probably the rest of the world put together. Let me give you a little history of the prepayment meter program in Britain.

When the gas industry was privatized in Britain in 1987, the newly privatized company was very eager to prove its commercial credentials to its shareholders and, very soon after privatization, it started to cut off consumers who didn't pay their bills promptly. On a political point of view this was very damaging, and the government was very keen to ensure that this didn't happen with privatization of the electricity industry. The solution it chose was basically that any consumers who had difficulty paying their bills had very little alternative but to move to prepayment meters.

What this effectively means is that in Britain we have no problem of disconnection. We have a negligible problem of disconnection. We have none. Basically, consumers who can't pay their electricity disconnect themselves. They don't use any electricity.

This morning I think I heard someone saying that consumers buy as much electricity as they want. The reality is, actually, that they buy as much as they can afford, and if what they can afford is not enough, then you have a social problem.

Prepayment meters are popular with consumers in Britain, there's no denying that, and the reason they're popular is that they help consumers budget. Consumers are not scared that they will face a situation in three months' time where they will have a bill that they can't afford to pay. So in the middle of winter, when it's cold, they're not scared to put on their heating systems.

A problem particularly in a competitive market is that these prepayment meters have a lot of attractions for the companies supplying electricity. They solve the problem of consumer debt—there is no consumer debt.

Also, in a competitive market, they identify the consumers who are least likely to be profitable. What you're moving to is an open market, and in an open market no company has any obligation to supply electricity on social grounds. They supply electricity because it will make a profit. Retail companies probably aren't going to make a living selling just electricity. They'll be looking to sell gas, telecoms, other household services. We've seen that very strongly in Britain, that companies move to be multiservice companies.

Again, a prepayment meter identifies those consumers who are least likely to be profitable consumers. So what has happened is that the highest prices go to prepayment meter consumers, and the prepayment meters camouflage what could be a very important social issue. In Britain I think the figure is something in the order of 20% of consumers who suffer from fuel poverty; in other words, 20% of consumers in Britain pay more than 10% of their household income on electricity and gas bills. So we have a serious problem but no way of identifying it with



prepayment meters. I just want you to be very clear that there are two sides to the prepayment meter question.

The final point I'd like to make is on the Ontario Power Authority. In many respects the new proposals are quite similar to the old proposals. Under the old proposals they relied on a private company's identifying a space in the market for new generating capacity and, unprompted, coming into the market and building new power plants. I think that opportunity still exists in the new legislation but there is a backstop position that if the Ontario Power Authority foresees a shortage, it can step in and commission the construction of a new plant. I think the likelihood is that very few people will go down the first route of spotting a market opportunity and speculatively building a plant. They will adopt the wait-for-calls-for-tenders approach.

I have two questions. Can the Ontario Power Authority identify the plant need in time, given that we're looking at a request-for-proposals situation and the construction of plants? We're looking for them to identify a plant need about six years forward. What we see in liberalized markets is a very much more chaotic situation on plant construction. If you look, for example, in one of the British newsletters on power, you will find that there are something like 13 pages of new projects for electricity-generating facilities, maybe 20 or 30 projects a page, all being proposed. The likelihood is that maybe 5% or 10% of those projects will get completed. How is the Ontario Power Authority to know what proportion of these projects will get built? If 10% of them are built, that might be enough. If 5% of them are built, that could be a catastrophic shortage. So it's going to be very difficult for them to identify that plant need.

Secondly, even if they can identify the plant need, is the RFP going to be a reliable way of meeting that capacity? If they decide they need 2,000 megawatts of capacity and they call for tenders, can they be sure that those that win the tenders actually build the plant? Again, in Britain we have experience there. We had calls for tenders for renewable plants, and for some of these calls for tenders the success rate on the completion was under 20%. So even if the Ontario Power Authority identifies accurately the need, will the requests for proposals actually result in the capacity that you need to meet that shortage?

Thank you. That's all I'd like to say. I hope there's room for questions.

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**The Chair:** Thanks. We have about six minutes for questions, and in this rotation, it's the government.

**Mrs Cansfield:** Thank you for your concern expressed around the issue of the prepayment meters, the power purchase meters. We in fact have one utility, Woodstock, that has had great success in that small community of about 4,000 people. It is not the intent of this legislation—which is actually in regulation—to be prescriptive in terms of the meter, but rather the function of the meter. So I think that sets aside your concern around going to an identified pre-purchased meter. That's not the intent.

The other is that you identified a concern around whether or not there would be this competitive process before OPA determined or forecast supply. I guess we can go on two things. One, we put out a request for 300 megawatts of renewable. We had over 90 proponents with 4,400 megawatts come in. They've put in place a process with NERA, and I would suggest you might like to visit the Ontario Ministry of Energy Web site to look at the two procurement processes. Now we have one out for 2,500 megawatts on both the demand side and new supply being treated in an equitable way.

I think if you were to look at the testimony of both Constellation and Calpine, which were at this committee, you would see that both of those companies expressed great interest in participating in this market. So hopefully that allays some of your fears that you'd only have to go to the OPA instigating that supply, that there wouldn't be the interest in the broader community. I think there probably would be.

One of my questions for you goes back to what you had said before. I read the previous proposal you put in front of us with some interest. You claim that our model has a mixed track record. I was curious as to where else in the world is there a hybrid model?

**Mr Thomas:** The Nordic countries.

**Mrs Cansfield:** The same regulated and wholesale spot market model is in the Nordic countries?

**Mr Thomas:** Yes. The Nordic countries have a mixture of private industry and nationally owned industry, locally owned industry. There are parallels—

**Mrs Cansfield:** But it's not a hybrid in terms of its regulated price for low volume and its open price for wholesale. So at least we can't find another—

**Mr Thomas:** In all areas where you have a partly open retail market, you will have a hybrid.

**Mrs Cansfield:** OK. It may be our interpretation, then, of "hybrid." That's what I didn't really understand.

Then I have a question, which I think you actually raised yourself. I wanted to know where your evidence was that retail competition hurts small businesses. You alluded to that and actually stated that previously, and I wanted to know where that—

**Mr Thomas:** Small consumers. Residential consumers, not small businesses.

**Mrs Cansfield:** OK. You said small consumers, but you didn't mean consumers, you meant small business? You indicated that there was evidence that retail competition hurts small consumers, and I wanted to know what that was based on.

**Mr Thomas:** Well, the reality is that in an open market, the people who get the best prices are the people who negotiate hardest, and the people who will negotiate hardest are the largest consumers. If you're pitting a residential consumer against an aluminum smelter, in terms of negotiating power, it's no contest. Small consumers, even small businesses, are not going to be able to negotiate as good terms as a very large—

**Mr McMeekin:** Almost by default.

**Mrs Cansfield:** But it's not empirical evidence. It's just your perspective and that's fine.

**Mr Thomas:** No. If you look at the prices in Britain, you will see that in 1997, when we had a half-open market, the retail companies allocated all their cheap generation to the competitive market. As a result, small consumers were paying 30% more for the generation element of their bill than large consumers.

The regulator said that introducing comprehensive competition would solve the problem and, in fact, it's made it worse. What has happened since 1997 is the price paid by small consumers for the generation element of their bill—in Britain, that's about half their bill—has gone up by about 5% and the price paid by very large consumers has gone down by 22%.

**Mrs Cansfield:** Is the small consumer a small retail consumer or an individual?

**Mr Thomas:** I'm talking about, I think, 100 megawatts. So it's basically all household consumers and small businesses. But mostly it's residential consumers I'm concerned about.

**The Chair:** Mr Ramal, quickly.

**Mr Ramal:** My question has been answered.

**The Chair:** Thank you very much, Mr Thomas.

OTTAWA VANIER  
GREEN PARTY ASSOCIATION

**The Chair:** Next I'd like to call the Ottawa Vanier Green Party Association and Raphaël Thierrin, please. Go ahead, sir.

**Mr Raphaël Thierrin:** Good afternoon. Bonjour, mesdames et messieurs, fellow members of the panel. Welcome to Ottawa-Vanier, which happens to be this particular riding, a riding in which the Greens had significant electoral success in the last election. This brief I'm presenting today fairly represents the views of the 226,000 Ontario citizens who voted for our party in the last federal election.

Bill 100 and electricity restructuring: I think we appreciate the efforts the government has made in, first of all, presenting such a bill in its first year of mandate, in holding these consultations and in taking our advice to establish a conservation bureau—which was in our 2003 Ontario platform—as well as mentioning alternative and renewable resources fairly often during first reading of the bill, in the definitions sections, the opening sections and other areas.

However, we do have quite a number of concerns because we feel that the efforts are a bit limp. We feel that there's a problem, in the sense that in the set out purpose of the act, there are no stated environmental or societal goals. Everybody talks about all kinds of impacts of energy, whether it's coal, gas, wind, nuclear etc, and yet environmental concerns don't seem to shine at all in the bill as presented thus far. It's the same thing with social goals.

We know that we're facing major issues of supply, security and reliability. We're facing major environmental issues. I think a lot of people feel that good alternatives and good renewable energy should be where we're heading. Yet, in a number of little ways, all over

the text, the bill doesn't seem to feel that such energy sources are the norm we should be striving toward, as close in the future as possible.

There should be set and clear goals for two dates, which should be very apparent that are on the horizon. The dates are 2007 and 2018. There was an election promise to phase out coal-fired plants by 2007. This is within the current electoral mandate of the current government, which is a majority government in this case. All the power to it. And 2018 is when the capability of the Ontario nuclear reactors—if no new reactors are built, 2018 is the date when 40% of the energy sources in the province need to be replaced by either new reactors, if that's the choice of this government, or other alternatives.

Essentially, the bill seems to have lots of sound bites but no bite. As well, the conservation bureau unfortunately seems to be a somewhat powerless watchdog, as opposed to an agency that actually is set to do things and to accomplish objectives.

I talked about no stated environmental and social goals. I believe the Pembina Institute has already delivered a brief that covers societal goals quite well, so I won't cover their ground.

**1500**

But in terms of environmental goals, the purpose of the act, for example, has wording like “encourage conservation,” “promote cleaner energy.” To me, “encourage” and “promote” are nice-sounding words, but what do they mean? When I turn off the light in my bedroom before I go to work, I'm promoting energy conservation. Certainly the government can have education and other measures and these are good, but don't we want to go beyond what individuals can do and shouldn't the province have a greater leadership role in ensuring conservation takes place, as opposed to encouraging or promoting it?

I note that in the purpose of the act, in terms of issues relating to the reliability and security etc of energy, there are good active words like “ensure,” “provide,” “facilitate” that do show the province is capable of exercising its legislative mandate and legislative muscle in making sure certain things get done.

In terms of alternative and renewable energy, the definitions that are in the act are pretty vacuous. They are pretty open-ended. There is a lot of room left for regulations that may come in in the future that may define, perhaps, nuclear energy to be a clean energy source. These are things that people will see. People are not just expecting the government to roll out its propaganda machine and say, “OK, because we have renewables and alternatives in the act, we're doing good.” That's not good enough; you need to define what you mean by those terms.

All the energy sources that are either renewable or alternatives and that are useful in the time span until 2018 are already known. So why not define them very clearly in the act and say, “This is it”? If perchance a miraculous discovery is made in five or six years, you can always change the act. But I think it's a wrong-

headed approach to leave it up to the regulations, which are less noticed by the media, to be where you can play with what exact definitions are for some of these sources of energy.

The criteria to determine whether a source of energy is alternative or renewable is also left to regulation. It sounds almost like these other forms of energy, be they biomass or wind or whatever, are kind of like outsiders of the bill. There is a lot of stuff in the bill to make sure existing forms of energy are managed well or not—I'll leave it to the panel to decide—but these other things are just kind of introduced; they're there but they're not really there.

Last fall, we heard about how the current government would make a change from the previous government by insisting coal-fired plants would be phased out by 2007. But 2007, in terms of government jurisdiction, is on our doorstep; it's tomorrow. So why not have explicit mechanisms stated in the act that define how the government will act to replace the 30% of energy it currently gets from coal with other forms, either by expanding other forms of energy sources or by setting clearer targets for conservation? Should it be a mix, should it be 15% through conservation and 15% through a transition toward windmills, for example? Should it be something else? Or should it be mechanisms that don't specifically state which technology is being used, but rather set up some mechanisms to go in that direction? That's really fairly fuzzy in the act. It's not so much that you have to put in the act that coal will be phased out in 2007, but at least provide mechanisms to make the transition to something different happens quickly.

I alluded earlier to 2018 being the sunset year for the last existing reactor in Ontario. We know we have a lot of difficulties with nuclear energy in terms of financial costs, but I think it's fair to say that nuclear energy creates a lot of security risks, it creates health risks, it creates environmental risks. We still don't know exactly what to do with the wastes that are left over. Will our civilization actually last the 500,000 years that are needed to manage that waste? And it's not even economically sustainable. Production costs, insurance costs—if the government did not have a limit on the liability for exposure in any accident at a nuclear plant, no private operator would ever want to take the management of such a plant.

We do have some major players in the world who are starting to think seriously about the phase-out toward other forms of energy sources. One of them is Germany, which has more than twice the population of Canada. Nobody can say that Germany is a small player in the world. It's one of the G8 countries. So there are examples of other societies that are moving toward phase-out in a fairly rapid agenda, looking at around 2020 or 2025, depending on which country is thinking of that. Belgium has definitely made a policy to go in that direction as well and Spain is considering it, I believe.

So what do we do? This time span to replace 70% of Ontario's energy toward other forms—there should be better mechanisms in the act to explicitly say that this is

something the Ontario government wants to do for the benefit of all.

In reading the brief that has been prepared by the Ontario Sustainable Energy Association, they recommend renewable energy tariffs as being one solution toward ensuring that you can use the entrepreneurship of individuals, companies, co-operatives, small towns and other places to harness their entrepreneurial drive toward putting into place market-based incentives that allow for windmills, for example, to populate more areas of the province and start that transition. So we recommend something along those lines. Again, the act should be explicit in at least setting the base toward making mechanisms like that more available so that other people, as they read the act, can say, "OK, yes, there is something in there. We can start planning various infrastructures," and there's an incentive to go down that path.

I have a few points also about the conservation bureau. Again, we're really glad that the conservation bureau is mentioned in the act. However, between the energy conservation task force that reported to Minister Dwight Duncan in January 2004 and the bill that appeared in June 2004, something seems to have totally dropped out of the picture. The ECSTF was recommending a champion that would lead the way. Instead, we seem to have a poor sister of OPA in Bill 100. We have in Bill 100 an institution that will provide leadership, and that is certainly different from coordinating conservation as part of a market strategy, which was mentioned in the recommendations of the ECSTF. It seems to be more like a watchdog; a few nice little things. They'll report now and then that a few good things are happening toward conservation, all so much the better, but the way I read the bill, there doesn't really seem to be an incentive for that institution to actually lead the way in forcing things to happen.

In conclusion, the Ottawa Vanier Green Party Association feels that the government needs to face the situation of this province a lot more clearly. There are things that will be happening soon that need to be resolved. Bill 100 should outline clear mechanisms to make renewable energy and maximum conservation the norm. Remember August 2003? There was a big panic in 2003, wasn't there? A big panic because the electricity went out, at least on this side of the river. Somehow it didn't go out on the other side of the river, but we'll look into that later.

#### 1510

It seems that after the August 14 and 15 blackout, a lot of Ontarians individually led the way. For a brief period of about two or three weeks, a lot of people were a lot more conscious about how many lights were on, how many appliances were on etc. Why can't the government show the way and follow in these footsteps, in the sense of having institutional mechanisms to make that type of conservation the norm, as opposed to an event that occurs only immediately after a crisis?

That's where we are. I think we would like greater leadership by the existing government. We are also sup-

portive of other briefs presented by various environmental groups.

**The Chair:** Merci. We have one minute for questions. Mr Marchese, you're up this time.

*Interjection.*

**The Chair:** OK. From the government side, Mrs Cansfield—30 seconds, quickly.

**Mrs Cansfield:** We've heard a great deal about clean coal. You can scrub the NO<sub>x</sub> and you can scrub the SO<sub>x</sub>, and then you get clean coal. What do you think?

**Mr Thierrin:** I think there are some seams of coal that have less. I personally don't have a problem, if it's truly clean, if other environmental groups, people who have more technical knowledge than I have, say it's clean.

**Mrs Cansfield:** What about CO<sub>2</sub>, the greenhouse emissions issue? Is that not an issue for the Green Party?

**Mr Thierrin:** It is an issue. We don't like any of the toxins that go in the air.

**The Chair:** Thank you for your presentation.

#### FRIENDS OF THE EARTH CANADA

**The Chair:** I'd next like to call upon Friends of the Earth Canada; Beatrice Olivastri, the chief executive officer. Welcome. You have 15 minutes, and during any time that's not used, we'll have some questions.

**Ms Beatrice Olivastri:** I'm assuming we're all friends of the earth. I'll be sending membership forms out right after this.

**The Chair:** Commence your presentation, please.

**Ms Olivastri:** Thank you for this opportunity. Friends of the Earth Canada is a national environmental research and campaigning organization which, with its Friends of the Earth International colleagues in 68 countries worldwide, seeks to formulate policies and actions for an environmentally safe and just society. Energy policy, particularly with respect to electricity generation, is a key consideration for such a society.

Today, Ontario stands at a crossroads as you consider Bill 100—I don't have to tell you this; I'm just underlining it—An Act to amend the Electricity Act, 1998 and the Ontario Energy Board Act, 1998. Friends of the Earth welcomes the opportunity to provide input to your decision-making. We recognize the need for a major change in direction in meeting Ontario's electricity needs and for clear and consistent signals, which we think you're in a position to provide, to consumers and suppliers of electricity in this province.

Friends of the Earth submits that the values of sustainability and equity should guide your choice of direction for meeting Ontario's electricity needs. Further, the principles of accountability and transparency must frame the policy direction the bill provides to key institutional actors in Ontario's electricity system. These include the Ontario Power Authority, the Independent Electricity System Operator and the Ontario Energy Board.

The direction for meeting Ontario's electricity needs that we would like to address is a sustainability path,

obviously. You would expect that from Friends of the Earth. Historically, Ontario's industrial economy was established on the basis of reliable, low-cost electrical power. Today, your government—our government—recognizes that the true cost of electricity has to incorporate the health, well-being and security of citizens as well as industrial entities. We think this is shown very clearly by the commitment to phase out coal-burning generation stations. However, as Bill 100 is currently formulated, we think there is a tendency to downplay rather than highlight the values that are implicit in the decisions you have already taken.

Clearly, the Ontario government does recognize that its citizens are demanding clean air and a healthy and secure environment. So Friends of the Earth is urging you to identify within the bill the protection of human health and the environment as fundamental goals of the design and operation of Ontario's electricity system. Again, I'm trying to speak to the functional nature of the bill, not the specific prescriptive kinds of things that I believe come later when these authorities are empowered.

We further urge you to emphasize that these goals of protecting human health and the environment are attainable at the same time as Ontarians will also receive assurances and, in fact, an adequate supply of electricity—and I'm going to underline this point—for those uses that require it. I will come back in just a moment to the notion of what we actually need electricity for.

In the interests of security, Friends of the Earth urges you to consider societal costs, such as financial, health, environmental, risk and community social impacts, but also to recognize the societal benefits of energy efficiency, dispersed and community-based generation, embedded generation and renewable generation, which I believe is a message you're hearing from a number of our colleagues and other environmental organizations.

In the interests of equity, then, we're also going to urge you to consider and recognize the special needs of low-income citizens—we've been through this kind of thinking back in the 1970s and 1980s around conservation—and senior citizens on fixed incomes who need special attention, so that they have access not only to electricity supplies but to the programs that are put in place, particularly around conservation and efficiency. In addition, the employees of energy sectors—I would be happy if this were addressing employees of Michelin facilities—who are affected by new directions in policy need support in dealing with retraining, relocation and whatever other kind of support is needed in their own transition, hopefully to new efforts, new technologies in the energy field.

Finally, in this section, in the interests of efficiency, we urge you to recognize that electricity is a very high quality kind of energy. It's also an expensive form of energy and should be used for things such as electronics, motors and such that can't use other kinds of—let me characterize it as lower-quality energy. In that respect, of course, conservation is one of those lower-quality, but

nevertheless important, sources. We regard it as a source of energy.

Therefore, in this section I have a particular kind of overarching recommendation that the purposes section of Bill 100 should incorporate into its overall goal the protection of human health and the environment and—again, the points I mentioned earlier—the test of societal cost-effectiveness in determining the plans and then the equitable treatment of low-income and fixed-income citizens and those whose employment might be affected by decisions on energy supply.

Moving to policy direction that we would like to see the bill provide to the institutional actors framed by this bill, since our founding in 1978, we have espoused a path to a sustainable energy future that has three key attributes. I'll quickly list them, but we're applying them in our recommendations to you further on. Always as a first priority—and I'm sure you've heard this frequently in these hearings—a serious commitment to energy demand reduction through different kinds of efficiency improvements and alternative choices, and to selecting the appropriate energy source for the use; secondly, a move to renewable energy sources to address sustainability and thus security over the long term; and thirdly, the consideration of scale and diversity of technologies that would address society's social and economic adaptability and resilience.

When we apply these to the choices we're faced with at this crossroads, we're going to submit a couple of recommendations to you specifically about the bill. Section 1 of the bill needs to make explicit the three attributes I've just referenced, so that as you move forward on the Ontario energy path—sustainability, we hope, being the focus—we will in fact maximize efficiency and conservation; we will maximize the potential contributions from renewable energy sources; and we will meet remaining demand after those first two priorities, only at that point, through least-cost and lowest-impact non-renewable supply. So it's kind of a hierarchy of approaches that we're proposing.

1520

On the next recommendation, we are asking you to incorporate these priorities into the mandates of the key institutional sectors framed by this bill. In particular, the conservation bureau, we believe very strongly, needs to be an independent agency, standing apart from the Ontario Power Authority. Its mandate should focus on implementing all cost-effective conservation and efficiency measures and, again, take into account environmental and social costs.

Secondly, as an authority, the Ontario Power Authority: Again, we're looking for a way of framing very specifically and clearly conservation, efficiency and renewable energy as top priorities and taking environmental costs into account.

Thirdly, the Ontario Energy Board should continue to have a clear mandate to promote conservation and renewable energy rather than a limited focus on price and cost of electricity. When they are reviewing and approving OPA budgets, fees and plans, we want to see the

Ontario Energy Board have a clear mandate that allows it to consider and maximize the value added of social benefits from, again, efficiency, dispersed and community-based generation, embedded generation and renewable generation. So that's dealing with some clarity on the mandate and the priorities of these authorities.

Finally, to address the government, what we would like to see is an aggressive minimum goal for conservation and renewable energy rather than maximum limits. We'd like to see that OPA is not limited by minimum goals, so we're going to go beyond that where it does make sense societally in terms of conservation and efficiency.

We're endorsing a recommendation that I think you've already heard from Greenpeace. We felt it was well stated and that we should simply replicate it: "The OPA shall, in planning, encouraging and procuring a portfolio of supply and demand initiatives and in budgets, fees and plans, consider and value the added societal benefits of" that whole list of the kinds of energy that we believe will support the sustainable society we're imagining and hoping you are supporting.

Finally, a key area to ensure accountability and transparency, overall, in the execution of this bill would be through a selection of the members of the OPA, the conservation bureau boards and the advisory committee for the OPA. That's one mechanism to ensure these two principles. Secondly, the requirement of public hearing review and OEB direction prior to ministerial review of OPA's business plan gives the public a chance to deal with these plans before a ministerial review. The final one is a requirement for the OEB to hold public hearings when exercising its powers under these sections that we cite.

In general we're looking for a way to thoroughly engage the public and to make sure that different facets of the public have a chance to adequately support and provide input at the appropriate points in time, and not be reactive after the fact.

Thank you again for this opportunity. I'm looking forward to future, more specific opportunities on measures, but I felt this would be the focus for the bill review today. Thank you.

**The Chair:** We have two minutes for questions on this rotation. Mr Chudleigh, you're first.

**Mr Chudleigh:** You mentioned conservation in that area. What percentage of Ontario's energy use do you think might be saved through conservation? I've heard 5%; I've heard 40%; I might have heard a 50%.

**Ms Olivastri:** I believe the current study that I've seen from the Pembina Institute talks about 40%. I believe the government has discussed 5%. There's quite a spread there. I would characterize my belief as serious and significant. I'm not sure I'm in a position to give you an exact number but I'm taking lessons from you guys.

**Mr Chudleigh:** You're getting a lot of agreement from the Liberals on significant—

**Ms Olivastri:** Is that right?

**Mr Chudleigh:** Yes. They're serious and significant kinds of people. That's all. Thank you very much.

**The Chair:** We want to thank you for your presentation.

**Mr Chudleigh:** It was meant to be sarcastic.

**Ms Olivastr:** Oh, I thought that was a compliment.

#### MUNICIPALITY OF KINCARDINE

**The Chair:** I'd next like to ask the municipality of Kincardine to come forward: His Worship, Mayor Glenn Sutton. Welcome this afternoon.

**Mr Glenn Sutton:** Thank you. Good afternoon. My name is Glenn Sutton. I'm the mayor of the municipality of Kincardine. It is a pleasure to be here today and to be given the opportunity to address the committee on the legislation of Bill 100. I have presented several comments to other committees—for example, Bill 35—over the years. I'm also chair of CANHC, the Canadian Association of Nuclear Host Communities, and I'm a director of Westario Power, our local LDC.

Kincardine is a municipality composed of the former municipalities of the town of Kincardine, Kincardine township and Bruce township. We are the host municipality for the Bruce nuclear power development, which includes both Bruce A and Bruce B nuclear generating stations operated by Bruce Power. As well, we are home to the Bruce Energy Centre, and Leader Capital recently announced plans to build a 200-megawatt wind turbine farm project in Kincardine, specifically Bruce township. Also, Vestas Canada, a supplier of wind turbine technology and equipment, is located here. We have many energy-related companies with offices supplying energy services.

My specific remarks on Bill 100 follow three broad categories. The first one is on the subject of the Ontario Power Authority. There is a need for an accelerated start-up of this organization. In our municipality, Bruce Power has taken over the operation of the Bruce site and improved the operational efficiency of the nuclear units. It is our understanding that business cases are being prepared for (a) the refurbishing of units 1 and 2 at Bruce A after the successful restarts of units 3 and 4 at Bruce A, and (b) investigating the potential for new build on site. Our municipality is also aware of, and supports, the new fuel project at Bruce B that will increase plant power output.

In order for the province of Ontario to phase out coal-fired generation facilities by the year 2007, it is absolutely essential that the OPA have an accelerated start-up. As per clause 25.2(5)(b), "to enter into contracts relating to the procurement of electricity supply and capacity in or outside Ontario," this is the operative part of the legislation that needs passage so that Bruce Power and other power companies can complete their respective business plans etc. The municipality of Kincardine is very supportive of nuclear power. We urge the committee to recommend swift passage of Bill 100 and fast-track the formation of the Ontario Power Authority.

The second major point concerns the hydrogen-fuelled economy. Nowhere in Bill 100 is there any mention of

hydrogen technology as an alternative energy source. In our view, this is a major omission that must be rectified. Hydrogen is an ideal candidate for a future transportation fuel. For example, in 1981 the federal special committee on alternative energy and oil substitution, in its Energy Alternatives report, had these recommendations, and there were three of them. A copy of the three recommendations is attached in my report.

Recommendation 38 stated, "The committee recommends that an energy system based upon hydrogen and electricity as the principal energy currencies be adopted by the government of Canada as a long-term policy objective"—page 188.

Recommendation 39 stated, "The committee believes that hydrogen will be an important element of Canada's future energy system and recommends that we begin now to develop the technology and infrastructure for hydrogen production, distribution and use."

Finally, recommendation 40 stated, "The committee agrees that the early demonstration of a hydrogen-based urban transportation system is required in Canada and recommends that research into this use of hydrogen be supported with the aim of rapid commercialization."

#### 1530

More recently, the Electricity Conservation and Supply Task Force in Ontario, on January 9, 2004, on page 57, stated, "Another longer-term option that may become more attractive is the use of off-peak power to produce hydrogen for use in fuel cells for automotive and other purposes."

Research and development into hydrogen fuel technology has shifted from Ontario to British Columbia. The industrial heartland of Ontario must adapt to hydrogen technology sooner rather than later. Nuclear power reactors are ideal candidates to produce hydrogen at off-peak times.

We must switch our fossil-fuel-based economy to a hydrogen-fuel-based economy.

I have an additional statement that was put on by Dr Geoffrey Ballard, the father of the hydrogen fuel cell industry, at a speech made on March 19, 2003:

"Non-polluting hydrogen fuel cells will soon be used broadly as a primary power source in transportation and in other applications. While renewable energy sources such as hydro, wind and solar have some role to play in the production of hydrogen required for fuel cells, only nuclear power has the potential to provide the vast amounts of energy that will be required if we are to start to move away from a carbon-fuel-based economy and to one based on hydrogen."

We respectfully request the committee to amend Bill 100 and add hydrogen technology as an alternative fuel technology.

The third major point is the energy centre of excellence. The Electricity Conservation and Supply Task Force also listed in its task force action plan, section 7.4, page 86, "Partnerships between industry and government in support of innovation, including an energy centre of excellence which will act as a focus for the development

of technology and approaches that build on Ontario's inherent strengths in the energy industry."

The economic development committee of the municipality of Kincardine has a project underway to attract the proposed energy centre of excellence to Kincardine. We would welcome the endorsement of this committee to have the province locate this centre in Kincardine.

Specific amendments—I just have a few here—to Bill 100:

Schedule A, paragraph 1.1, the purpose of the act: Add a new clause (k) that states "to develop an energy system based upon hydrogen and electricity as the principal energy currencies as an immediate policy objective by the government of Ontario."

Subsection (10), "renewable energy source": Could you please add "hydrogen fuel" to that list.

Section 13.1 (1) of the act, re the establishment of an advisory committee: Add "an advisory committee on hydrogen fuel technologies" as one that must be established.

Paragraph 25.2(5)(i): How will the OPA borrow on its credit? It now has no assets. Will the fees it collects generate enough funds to establish a credit rating? In section 25.17(1), the Minister of Finance can "purchase securities of or make loans to the OPA." Is the province guaranteeing the OPA's financial position?

Section 25.11(1): In addition to appointing a conservation bureau, an alternative energy bureau and a science officer should be appointed.

Section 25.28(2), clauses (a) to (d): There are no timetables there. We should have timetables.

One comment on schedule B, subsection 11(1), adding subsection (3.2), "Rates to reflect cost of electricity": this should be revised from "shall ensure that the rates reflect these costs" to "must ensure that the rates reflect these costs."

I have three more short verbal comments. Earlier today, a Sierra Club representative stated that there was no support for nuclear power. This is not the case. Based on a recently released survey by the Canadian Nuclear Association, 67% of the people who live in Ontario support nuclear power.

Next, CANHC, or the Canadian Association of Nuclear Host Communities: Our organization passed a motion at its February annual meeting in Ottawa that basically endorses the refurbishing of existing nuclear plants and endorsing the building of new nuclear generation facilities.

Finally, on the subject of public-private partnerships, there are two successful examples in Kincardine. The first one is Bruce Power and their long-term lease of the Bruce site from the province and, secondly, Westario Power, which is a partnership of FortisOntario power and the local surrounding municipalities. These two developments in Kincardine clearly establish Kincardine as a powerhouse of Ontario.

I'll answer any questions.

**The Chair:** Thank you very much, Your Worship. We have about five minutes. Mr Marchese, you're first on this rotation.

**Mr Marchese:** Thank you, Glenn. There are a number of people who have concerns about nuclear, and much of it has to do with costs. You know that when we refurbish each and every unit, the costs are astronomical. In your view, "That might be the case, but too bad, so sad. That's what it costs, but we need it because it's clean—"

**Mr Sutton:** I would agree with you in the case of the Pickering situation. However, if you refer back to Bruce A, units 3 and 4, we have returned two units, 700 megawatts each, back to service basically within time and within budget. Now, that's a refurbished nuclear reactor. If you go to Qinshan in China, AECL has two nuclear CANDU units over there built on time and under budget. So it can be done. It just takes disciplined project management.

**Mr Marchese:** So the kind of costs we've seen to refurbish these nuclear plants could be done more efficiently. It's just that somehow they've gone out of control. Maybe they weren't built properly or maybe the refurbishing isn't done well. Is that what you're suggesting?

**Mr Sutton:** Going back to efficient project management, one of those elements is financial and cost control. Going before that, you have to have the detailed engineering done, and that was done in the case of Bruce A. You're aware, in the Manley report, that there was evidence given that that was not the case. Clearly, if financial controls and engineering discipline are followed, it can be done. I'm sure it can be done safely and under budget at Bruce units 1 and 2. It was a mistake to close down the Pickering A and Bruce A reactors. I think we all realized that last August.

I picked up on Mrs Cansfield's comment earlier, about 10 minutes ago, about coal. Generations in the future are going to say, "Why did we ever burn coal for its heat content?" Think about it. I'm an applied chemist, a chemical engineer. I've been a retired nuclear engineer for 31 years. However, if you look at coal, why not transfer coal by chemical reactions to aspirin, pantyhose—consumer goods for society—rather than just for its heat content? If you remember one message from today: Coal is bad; hydrogen is good. Hydrogen and electricity is a good marriage made in heaven.

**Mr Marchese:** I'm sure Donna has some questions for you, but I have a question not on coal, but on the issue of nuclear. We're storing this nuclear waste and this radiation. I don't know where it is, actually, but it's probably above ground somewhere. It concerns me in terms of this issue. Someone down the line has to worry about it, presumably. Others think, though, it won't be a problem 10,000 years down the line because people would use it or want it. I'm concerned about it. Does it concern you?

**Mr Sutton:** In my opinion, speaking for myself only, it's a political and not a technical problem. Right now, the Nuclear Waste Management Organization in Ottawa is looking into a three-year project to report back to the federal Parliament on what to do with the long-term storage of nuclear fuel. Right now, it's currently stored safely above ground in welded steel containers. They're

going to look at three options for the future. There is also a nuclear waste fund to dispose of this waste. If you look at the back of the OPG reports, these funds are stated as an appendix or schedule to that report.

**Mr Marchese:** But you've got no problem in terms of the dangers that it might have. It has no dangers in your view?

**Mr Sutton:** No. I'd like to invite you to come to the Bruce reactors, and we'll take you to where those radioactive flasks are stored. You walk right up to them.

**Mr Marchese:** We'll go without clothes.

**The Chair:** Mr Ramal, please. We have two minutes.

**Mr Ramal:** I have a question for you. You talk a lot about hydrogen to replace the coal-fired generation. I believe we produce about 25% of our electricity across the province from it. I'm not familiar with hydrogen energy. How efficient is it, what's the cost and how fast can we do it and put it in place to replace the losses?

**Mr Sutton:** It's doable. It started a number of years ago in the state of California, where I think they had a target of either 5% or 10% for their car fleet. The manufacturers of cars had to produce fuel-efficient cars, and one solution was hydrogen.

My concern is, some of you have car and truck plants in Oshawa, Windsor, Oakville and so on that produce four-, six- and eight-cylinder engines. Thousands of auto workers have jobs in that area, and I'm concerned, if we don't act now, that in five, 10 or 12 years—and that time will go fast—they will be displaced. They're going to lose their jobs to other workers producing fuel cells.

There's a small company in Toronto that produces fuel cells. There's another company in Kingston that produces solid oxide fuel cells. There's a demonstration project being put on next year at the University of Toronto's Hydrogen Village. So there are small leaps and bounds here, but we've got to make a commitment to produce hydrogen. In our opinion, the best way to do that is through electricity. It's not by steam reformation, like a chemical plant; it's basically through taking electrolysis—do you remember your chemistry classes? Electricity splits water into hydrogen and oxygen.

So at night, when the nuclear stations are still producing the power, not all of it's required for use on the electrical grid by the consumers. But when the demand goes down, maybe 30% or 40% of that can be diverted to a hydrogen production facility to produce hydrogen gas. It can be liquefied, pumped in a pipeline or stored in metal hydride containers and so on safely.

**Mr Ramal:** Also, another question—

**The Chair:** Stop. We're out of time.

Thank you very much, Your Worship.

1540

ROD SHEPPARD  
LANNY TOTTON

**The Chair:** I will now ask Rod Sheppard to come forward, please. Welcome.

**Mr Rod Sheppard:** Good afternoon, Mr Chair and to the committee. Thank you very much for allowing us to appear today. I am Rod Sheppard. I am a Bruce Power employee and I am the executive vice-president of the Society of Energy Professionals. I have Mr Lanny Totton with me today. We're going to present a very brief presentation. Mr Totton is the vice-president of OPGI, one of our sectors. I'll turn it over to Mr Totton for a minute.

**Mr Lanny Totton:** I'm very pleased to take part in this committee. I think it's a very democratic way to listen to all the views and all the options in front of you. This is sort of déjà vu for me. I remember meetings in the 1970s and 1980s at Ontario Hydro where we struggled to provide low-cost generation and distribution to the consumers. I remember considering a lot of the conservation and generation options that you now have.

We are concerned with the continuing economic experiments with the electrical sector. In Bill 100, the minister is proposing some important changes that will affect the cost and reliability of your electricity.

We support the goals of the government's plan, but it doesn't go far enough. With last year's blackout and rising prices, we are concerned that the legislation doesn't ensure public control and ownership of the electrical industry, which may threaten the reliability, affordability and security of your electricity. Ontario should be self-sufficient in a sustainable electrical supply. Conservation is great, but it cannot be sustained. That's the trick.

To keep prices down, our current public power companies need to be allowed to compete on building and operating new projects, especially hydroelectric opportunities. We must continue public ownership of all new facilities generating and transmitting power to our communities. All government contracts should be open for maximum public scrutiny and participation.

We must ensure adequate funding for Ontario Power Generation and Hydro One. Our current public producers and transmitters are underfunded and they are now still giving you the lowest rates in North America. They've been underfunded for at least 15 years.

We need to create a multi-stakeholder task force to make recommendations on a responsible transition from carbon-based fuels, on financing and on alternatives for reducing air pollution.

Together, we can keep our lights on.

**Mr Sheppard:** I'm here to talk about our item 6, which was the joint public-government task force on a reliable, affordable and efficient energy future. In an effort to forge a broader consensus regarding the future of electrical power in Ontario, the Society of Energy Professionals, "the society," IFPTE Local 160, proposes the immediate formation of a joint public-government task force to make recommendations on a responsible transition from carbon-based fuels and on sound financing for new energy sources. It is our firm belief that as energy professionals and experts, we must look at



Ontario's energy problems in a rational and professional light, free of politics and sacred cows.

As the representative of 6,000 professionals and experts in Ontario's electrical sector, the society proposes the following basic principles for guiding and structuring the joint task force. This is the proposal that we're putting in front of the committee today.

(a) The mandate of the task force: Develop fact-based findings and offer specific recommendations on (1) a responsible transition from pollution problems posed by current coal-generated electricity, (2) financing options for funding future electrical power requirements, and (3) financing options geared toward maximizing the benefits for taxpayers and electric power consumers.

(b) Task force composition: The joint task force will have eight members, four picked by the government and four picked by the Society of Energy Professionals. The government and the society will each select one task force member from each of the following categories: (1) experts from the public energy sector, (2) business, (3) environmental, and (4) consumers.

(c) Selection of the task force professionals: The government and society factions of the joint task force will each select one qualified professional consultant with appropriate expertise and experience in Ontario to conduct the research, present findings and draft the final report in consultation with the task force.

(d) Task force final report: The joint task force will issue a single final report to the public, incorporating its findings and recommendations. The joint task force members will try to reach a consensus on the report's findings and recommendations. If, however, this proves to be impossible, decisions will be governed by a majority vote.

(e) The term: The joint task force will have six months to complete its investigation and produce a final report. During that period, there will be a moratorium on the implementation of all RFPs related to the reorganization or restructuring of present electrical power operations and financing. RFPs for renewable energy generation will not be part of this moratorium.

I thank the committee for their time.

**The Chair:** Thank you very much, sir. Do you have anything else to add? We have about six minutes for questions. The government side is up first. Any questions? No questions. Mr Chudleigh?

**Mr Chudleigh:** No. Thank you very much for your presentation.

**The Chair:** Mr Marchese?

**Mr Marchese:** Are you both saying that what Bill 100 does, or doesn't do perhaps, is that it's not looking responsibly at making this transition from the elimination of coal to other sources of generation of power and that this task force would do a better job of it? Is that basically the point?

**Mr Sheppard:** That's certainly the point. We're concerned about the schedule, the amount of time currently in the bill for the transition, the 2007 issues of—

**Mr Marchese:** That it's inadequate or unrealistic, is going to lead to problems, basically. Is that the case? You might want to speak a little more generally about why you think we should be listening to that. Other members don't have any questions, and that concerns me.

*Interjection.*

**Mr Marchese:** You have some questions?

**Ms Wynne:** When you're done.

**Mr Marchese:** I'm glad Kathleen has questions. I was worried that maybe you're not giving us information as to what the problems really are.

All I could gather from that line is that there's politics here and that's part of the problem, that we're not getting this right and Bill 100 certainly isn't getting it right and a task force would get to it in a better way.

**Mr Totton:** Well, there's conservation. The things you can do for conservation are really threefold. You can get new equipment or replace it with different equipment that uses different energy, but that's a 30-year program. You can get people to turn off the power. You can incent them to turn off the power. In the early 1980s we had inflation; prices went up about 30%, and people did turn off the power. So price is a factor there. You can increase the price and they will conserve. Or you can get them to turn it off themselves—you can turn it off for them—like water heaters or that sort of stuff. There are all sorts of ways to do it, but to remain sustainable is really the hard part.

**Mr Marchese:** But your point is that the task force would get to these matters in ways that we are not getting to through these hearings?

**Mr Sheppard:** We would hope.

**The Chair:** Ms Wynne, please.

**Ms Wynne:** I wanted to ask you a question and then make a comment. Your organization has had an opportunity to speak to ministry officials, I'm assuming, on various occasions? You've been in conversation with—

**Mr Sheppard:** Right.

**Ms Wynne:** So that avenue is open to you. When I look at this document, many of the things you're suggesting this task force could do are things that I think are intended to be done by the bodies being set up in the bill. So this is a political statement about the ability of the bodies in the bill to be successful, right? You're basically saying to us that you don't think the OPA can do what it says we want it to do and you don't think the OEB can do what we want it to do. Is that basically the gist of this?

1550

Having sat on that side of table, I think you know it would be very difficult for the government to take up this offer, because there are many, many groups who would like to be four of eight members with the government on a task force. We've heard from many groups that would like to do that. I appreciate the statement, but I just want to be clear about exactly what you're saying and that you understand why it would be so difficult for us to take up that offer. Is that fair enough?

**Mr Totton:** We understand.

**Ms Wynne:** OK. Did you want to comment on that?

**Mr Sheppard:** The issue of stakeholders in this province having an opportunity to provide input outside this forum, and with the OPA, concerns us. We want to make sure the sector is looked at, not in a rushed-through fashion but more with a business and environment look-see to make sure we haven't missed anything.

**Ms Wynne:** I really appreciate that. You guys have been very organized. Months ago you were in my office, so I assume you were in all the MPPs' offices. You've talked to all of us. You've talked to the ministry. I really appreciate the work you're doing to make your points, and I'm sure the dialogue will continue.

**The Chair:** And your question is?

**Ms Wynne:** Actually, it's my understanding—again, having sat on that side of the table—that sometimes what needs to happen is that a comment is made. Thank you very much.

**The Chair:** Thank you very much, gentlemen.

#### CONCERNED CITIZENS OF RENFREW COUNTY

**The Chair:** I now ask Mr Hendrickson to come forward. He's representing the Concerned Citizens of Renfrew County. Good afternoon, sir. You have 15 minutes, and in any time that's not used, we'll have some questions.

**Mr Ole Hendrickson:** Thank you very much. I represent Concerned Citizens of Renfrew County, which is located about an hour and a half up the river in Pembroke, Ontario. We've been intervening for some 15 years on matters related to operations at AECL's Chalk River lab, so we're mostly before hearings of the Canadian Nuclear Safety Commission on environmental matters such as pollution of the Ottawa River. But we certainly recognize the need to do a transition to more diverse and renewable sources of energy, and that's mostly what I'm going to talk about here today.

I've done a little handout here. I don't know if you all have it. What I would like to see in terms of the purpose of Bill 100—what do you really want to accomplish?

—You want to create an adequate and secure electricity supply, not what's in the explanatory note for the bill, which talks about expansion of electricity supply. We don't necessarily need to expand it, certainly not everywhere in the province, and certainly aggressive conservation measures may alleviate the need for electricity supply expansion in some places.

—To speed the transition from non-renewables to renewables. I'll talk about all of these points in more detail.

—To reduce greenhouse gases and air pollutants. I think we all recognize the need for that.

—To facilitate full accounting of environmental, economic and health costs of the alternatives.

—To minimize the security risks associated with electricity generation. That's certainly on many people's minds these days.

—To encourage locally generated and diversified power sources, including credit for smaller generators who can feed into the grid.

—To ensure full and effective public participation in electric sector decision-making.

—To supply all Ontario residents with basic amounts of electricity at an affordable cost.

I'll go through all these. I think they're fairly common sense.

In terms of the transition from non-renewable to renewable sources, our group of course thinks we need a phase-out plan for both coal and uranium generating facilities, because these do pose, I think, unacceptable burdens on current and future generations. They really can't be a component of sustainable development over the long term.

I think we are all aware of the increasing prices of oil when we go to the gas pump, and we know the oil supplies are going to peak in the very near future. I'm sure you've heard this and are quite aware of that. So renewables, such as wind, hydro and biomass, which is of particular interest to rural Ontario, are cost-effective today. They have low operating costs but often have fairly high upfront capital investment costs, just like nuclear power does. So there is a choice there: Where do we put our public dollars?

Another objective of Bill 100 could be to reduce greenhouse gases and pollutants. I think we're going to be under increasing pressure to do that. Climate change is linked to both health and our economy. We're seeing an increased frequency of extreme weather events like ice storms. We don't know if it's directly attributable to greenhouse gases, but they have economic and environmental consequences.

**The Chair:** And floods too.

**Mr Hendrickson:** And floods, yes. Peterborough—my in-laws are from Peterborough. They escaped it, luckily, and I know you're representing their riding.

**Air pollution:** We have an asthma epidemic. Asthma is just going up at an unprecedented rate, and there is certainly a link to coal generation there.

But more generally, I think we're going to see increasing pressure on businesses of all sorts to show that they are making environmental performance targets. Corporate responsibility is going to drive a lot of this transition and a lot of the impetus to reduce greenhouse gas and air pollutants.

In Canada here we're probably the furthest from meeting our Kyoto target of any industrialized country. Our record isn't good. Why not? We got off to a slow start. We're not performing very well. We hadn't funded this very well. We've got a very difficult target of a 6% reduction and we don't want to have a national consensus on the need for this despite, I think, the scientific community speaking in a pretty unified voice.

**Full-cost accounting:** You've probably heard about this, the environmental externalities associated with production. I mentioned coal-fired electricity production, which has both severe health and climate change impacts.

They're roughly equal, according to this international study done by Green Budget Reform, a fairly interesting group which includes people from a number of different countries around the world. For oil and gas, it's climate change which is the most worrisome externality, but certainly there are health consequences associated with the direct emissions from those facilities.

Security risks associated with electricity generation I think are why we are simply going to have to do the transition away from nuclear power. The risks are simply unacceptable. Up in Chalk River we had a meltdown in 1952. That was a wake-up call. The original NRX reactor: You may recall hearing that US President Jimmy Carter was one of the many military personnel who rushed into that unstable reactor and helped avoid a Chernobyl explosion-type catastrophe, but there were huge amounts of contaminated waste resulting from that meltdown at Chalk River.

So we know what can happen if things go wrong. We know that terrorists are operating around the world and we also know that the same technology for nuclear power is also used for weapons of mass destruction. I think all these things mean that nuclear power has to be phased out. But centralized power systems in general are vulnerable to terrorist disruption or climate disruptions.

We have to move toward more diversified and locally generated power sources. This is a primary strategy to have a secure supply of electricity. Things like advanced renewable tariffs for wind energy I think would be very appealing to rural Canadians. Up my way we have lots of farmers who haven't done particularly well with BSE and they're looking for alternative sources of income.

It's not just rural Canada that can generate electricity but cities also. There are experiments with putting wind generators, and certainly if solar ever becomes more cost-effective, we'll see a lot of development of solar cells on tall buildings in cities.

I think net metering—and there are many names for this, but you get credit for the electricity put into a grid—is an idea whose time has come. I know that the McGuinty government is proposing smart meters that can help with load management so that people can turn on their appliances when demand is low. That has some application, but let's jump to meters that allow people to feed into the grid. Why is that important? Well, look at an office building where they might be considering a wind tower on the top. The incentive simply isn't there to build more than the demand of that particular facility unless they can do net metering, unless they get some credit for what they feed into the grid. So not having that metering is a definite disincentive to renewables because renewables don't operate at 100% capacity, as you know.

**1600**

Another important aspect of locally generated power is simply that it promotes community engagement; it gets people involved. Community engagement and public participation are really, I think, where Bill 100 needs a bit of strengthening and a little more thought. I'm also on the board of something called the Ottawa River Institute,

and we've been working on climate-change education in Renfrew county schools, both separate and public, in partnership with a program called Destination Conservation. Civil society is really willing to get out there and do conservation work. When we hand out low-flow shower heads, people are willing to install them. You get results when you engage the public, and the Federation of Canadian Municipalities has done excellent work in this area. That has got to be part of the strategy for the government and part of the objectives of Bill 100.

You can't just ask a single authority like the OPA or its conservation subsidiary to do all this. You've got to create an environment where it can interact with other government agencies and formulate in common with others' goals and targets, and have appropriate monitoring and reporting systems to see if those goals and targets can be met.

Finally, I'd say a key objective—and I think people will appreciate this—is to supply all Ontario residents with basic amounts of electricity at an affordable cost. Again, that's not just the mandate of an OPA. Clearly, other finance ministry officials need to work on that as well. But electricity has to be integrated with other sectors such as municipal affairs and housing, natural resources and environment. That has to be encouraged in new legislation.

You can do innovative things like multi-tier pricing systems, where you get your basic supply of electricity at a fairly low rate and then it ramps up for people who have the money and have more expensive appliances; they pay more. That should be a way of encouraging conservation as well as making sure that power is affordable to all. Electricity really is a basic societal need and we have to treat it as such.

**The Chair:** We've got about seven minutes left in rotation. We have Mr Chudleigh first.

**Mr Chudleigh:** Are you suggesting that our conservation efforts could replace all of our coal-fired and nuclear generation over the next five, 10, 15 years? What kind of time frame—

**Mr Hendrickson:** No, I think the time frame for a coal phase-out of seven years or so is a reasonable one. I believe that's the ballpark there. Nuclear is going to take longer.

**Mr Chudleigh:** Seven years to phase out in 2007 or seven years from now?

**Mr Hendrickson:** Is it 2007? I'm sorry, I'm not—shorter, I think, is doable for coal.

**Mr Chudleigh:** I see. Thank you very much.

**Mr Marchese:** You mentioned smart meters and you said they have some application. We had a few other people here talking about how wonderful the idea is. I thought it was a very modest thing. Some people said you could possibly save 10% of power through smart meters. I didn't think so, I don't believe that, but there are a number of people who believe that this is really great. Your wording is that it has some application but it's really not that big.

**Mr Hendrickson:** I've even written the Minister of Energy to voice some concerns about this. Smart meters have some cost too for the utilities that have to do the billing associated with this. If you're going to jump into a new generation of meters, I think you should look at various options, look at the experience of some jurisdictions that have put in smart meters. Those people aren't going to sit there all day and monitor the price of power and decide when they're going to do their washing. That's not an option for most families. The savings from smart meters come from larger consumers of electricity, from industrial facilities. I don't necessarily see this as a key step for the average consumer.

**Mr Marchese:** In terms of the conservation bureau, you mentioned that on its own. Some people talked about the fact that it should be independent, the fact that it's merely there as a watchdog but really not proactively engaging the public on what else it could be doing and it doesn't really have much money to be able to give greater incentives than what it actually is doing at the moment.

**Mr Hendrickson:** It's been quite a while since I testified in front of a provincial hearing, and the last time I did it was on the Environmental Bill of Rights and the Environmental Commissioner. One person can really do a lot if they have powers to audit, to get into books, but I don't see those powers in the conservation bureau as it's presently written. What can a very small group do by itself? Not a lot unless it has those kind of auditing powers.

As I did say in my presentation, I really think that a broad engagement across the government and across levels of government is going to be required to get conservation in place. Certainly, civil society and industry have a major stake in this as well.

**Mr Jean-Marc Lalonde (Glengarry-Prescott-Russell):** On page 4 you refer to public awareness and implementing conservation. As was brought to our attention by a previous presenter, you mentioned that after last year's blackout, for two or three weeks people were concerned about how they were using electricity. Do you think the government has done enough to promote conservation to the people of Ontario? Everybody was concerned at that time, everybody was afraid to be in the dark again. Do you think that the government should continue to promote conservation?

**Mr Hendrickson:** I think a continuous effort is needed. Even that blackout last August was only in the media for a couple of weeks and then there were some stories about where was it caused, that it started in Ohio. Everybody relaxed. We know why it happened, but the fundamental root causes that could lead to future blackouts haven't been addressed; certainly not. We've been lucky. It hasn't been that hot a summer. We haven't had the kind of air conditioning demand in Toronto that—

**Mr Lalonde:** We've been fortunate this year.

**Mr Hendrickson:** We've been fortunate. Nobody wants blackouts to be the driver for conservation. If

we're not going to rely on disasters, then we have to rely on awareness-raising and continuing efforts.

**Mr Lalonde:** I have to say that last year when we had the exhibition in the Legislature on smart meters, I happened to go to one of the suppliers to borrow the equipment for a month. I went around to the rural areas telling them how much they were consuming in electricity using a certain part of a piece of equipment versus another one. I'll tell you, after they found if the swimming pool keeps running all day, comparing how much it would cost you if you shut it off during the evening, those people haven't used the consumption ever since. But we have to promote conservation.

**Mr Hendrickson:** Let me be straight, if I can, on smart meters. I totally agree that awareness by consumers of the power demand of a particular appliance is extremely important. If you can't measure it, if you don't know how much it is, you're not going to conserve. But my understanding of smart meters is that they often are a step removed from the consumer and they simply shift loads in a sort of passive and uninformed way. Maybe there are smart meters and smart meters. Again, I think my point at least holds that you've got to look at what you're giving them.

I spent half a day in the patent office across the river just to look at the kind of patents that have been taken out on devices that you can plug into your wall socket just to see what this particular appliance is using. I think there's a huge role for that and you can't really buy those in Canadian Tire yet.

**The Chair:** I want to thank you very much, sir, for your presentation this afternoon. We're out of time.

**Mrs Cansfield:** I have a question, not of the presenter; it's a question for you, please, Chair.

Two things: One is we've had some comments that have been made about the nuclear industry. Since we have a foremost expert in our midst, I wonder if we could get some accurate information around incidents, melt-downs, that kind of thing that was in this paper—and, sir, it wasn't just yours, it was others—just for the committee's accurate information.

The other is the issue around smart meters. The gentleman said to look to other jurisdictions, and I wondered if we could do that as well. Obviously, there's a misunderstanding as to what a smart meter is as intended in the bill and what's been happening in other jurisdictions.

**The Chair:** You'll have to consult with Mr Chudleigh and Mr Marchese on that for some additional information to be brought forward at this time. Mr Chudleigh?

**Mr Chudleigh:** I have no problem.

**The Chair:** No problem. Mr Marchese?

**Mr Marchese:** Just to point out, before we listen to—

**Mrs Cansfield:** It doesn't have to be now. It could be later.

**Mr Marchese:** That's fine. The point I want to make on the first matter, about nuclear, is that I'm not sure there is an accurate view on nuclear, because I think it's disputed by various authorities. So I don't know who we

should get to give different accounts of what is accurate on that matter.

**Mrs Cansfield:** My understanding is that there is an international agency that monitors these situations around the world, and this gentleman was the deputy director of that agency.

**Mr Marchese:** I hear that. We can do that too.

**Mrs Cansfield:** So I don't think that's biased when they've been identified and documented.

**The Chair:** Is there concurrence that we'll allow this gentleman to submit that information?

**Mr Marchese:** Sure, yes.

**The Chair:** And information on the smart meters to clear up any controversy or misunderstanding surrounding the smart meter concept. Who is doing that?

**Ms Wynne:** I didn't understand. So you're asking for a report, Donna, on that—

**Mrs Cansfield:** Yes, I'm just asking to give you accurate information. Research could do it.

**Ms Wynne:** Yes, great.

**The Chair:** There you go.

This concludes the presentations to the standing committee on social policy this afternoon. Thank you very much.

*The committee adjourned at 1611.*



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