

“The 3-E Value of Energy Conservation”

Notes for Remarks

by Peter Love,

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Good morning. I'm delighted to join you today. This is my second appearance at a Toronto Board of Trade Power Breakfast. I'm proud of my family's connection to the Board of Trade – both my great grandfather and my father were presidents, and today I'm wearing my father's tie as a symbol of that connection.

This morning I'm going to talk about the three "E"s of conservation – I'll tell you what those are in a moment. I'm also going to reiterate and re-emphasize some messages that I have been bringing to audiences in every sector and every part of the province since I took on this job three years ago. The essential message is that conservation is important to everyone, and each of us can make a valuable contribution. It's critical that we each **think** about our electricity use, **believe** we can make a difference and **act** to conserve. I'll also tell you a bit about how well we're doing in this area.

With these objectives in mind, let me briefly restate the conservation challenge we face in Ontario today. Many of you will be familiar with this story but I believe it bears repeating.

Over the next 20 years, about 80 percent of Ontario's total electricity generating capacity – some 24,000 megawatts – will need to be replaced or refurbished. This is a stark reality based on projected economic and population growth, the remaining useful life of our nuclear generating facilities and the need to eliminate coal-fired generation. It is a formidable challenge – and an urgent one.

I'm happy to report that we are well on our way to replacing those 24,000 megawatts. The OPA already has 10,000 megawatts of electricity under contract for projects that are in various stages of planning, approval and construction. It's a great start to solving our electricity supply issue.

Security of energy supply is an issue that affects every person in the province, in every area of daily life and every field of activity, from the home and workplace to vital institutions such as schools and hospitals. This security issue is one that is largely ignored as long as the lights are on. This means that areas of the province that require an additional source of supply for security reasons, such as Northern York Region, have difficulty accepting that there is a need. If the one source of power – a single transmission line – fails, the lights won't stay on. We have to act in these situations before there is a problem.

But, as you know, the OPA has a plan, the Integrated Power System Plan, or IPSP, which was submitted to the Ontario Energy Board last August for approval. The IPSP is now in the interrogatories phase of the regulatory review. It proposes to address Ontario's electricity supply challenge through a combination of a strong, sustained effort in conservation, development of renewable and clean energy sources for electricity generation, upgrades to our transmission system, and refurbishment and new construction of nuclear facilities – it is a diverse and truly integrated plan that will deliver a reliable, sustainable electricity system.

The importance of the conservation element cannot be over-emphasized. The IPSP is a \$60 billion plan, and that is a bill that will have to be paid by Ontario electricity consumers, with significant implications and opportunities for the provincial economy as a whole.

These considerations aside, conserving electricity makes sense from many standpoints. I like to talk about the “3-E value” of conservation – the 3 Es represent employment, economic and environmental benefits.

Taking these elements in order, conservation creates jobs and new businesses in technology and product development, manufacturing, distribution, marketing, sales, installation and maintenance, as well as in a variety of service areas such as energy management and consulting – so-called “green collar” jobs. The American Solar Energy Society estimates that, in the U.S., one in four workers will be engaged in renewable energy or energy efficiency-related jobs by 2030 – this represents a total of 8.5 million direct and indirect jobs from energy efficiency, based on its report *Economic Drivers for the 21st Century*. That in itself is a boon to economic growth, and those who take the lead will definitely benefit the most.

Also on the economic side, energy costs are a significant ongoing expense for every homeowner, business, industry and institution. Conservation can reduce electricity bills, freeing up money to be spent or invested elsewhere.

And on the environmental front, you should be aware that in Canada, 82 percent of man-made greenhouse gas emissions come from the production and use of energy. Fossil fuel generation, particularly from coal plants, is a major contributor to greenhouse gas and other emissions. So by using electricity more efficiently and wisely, we can all help to address environmental concerns.

The 3-E value of conservation provides a foundation on which we can build a culture of conservation in Ontario. It’s a win-win-win situation for everyone.

One of the difficulties, however, is that unlike water, gasoline and other commodities we use, electricity is invisible. We can’t see it or touch it, but it’s easily and readily available – flick a switch or plug something in and it’s just there. We don’t have to go somewhere to pick it up and it doesn’t run out. We don’t actually think about it very much. And because electricity has always been there – and has always been relatively inexpensive – our consumption habits have become ingrained over our lifetimes, in fact, over generations.

But this kind of thinking results in lost opportunities -- particularly for businesses.

Electricity – in fact all forms of energy -- should be seen as a valuable strategic asset, one that can and should be managed for optimal use. It can be bought when rates are low during off-peak hours and sold in demand response programs at an agreeable price when it is needed more urgently by others.

Part of my job, then, is to get everyone in the province *thinking* about electricity usage, *believing* in the need for conservation and that their actions will make a difference, and finally *acting* on this belief by using electricity responsibly and buying more energy-efficient products and services. This is what we call the *think-believe-act* solution, and it is really the essence of creating a genuine, sustainable culture of conservation in Ontario.

Let me turn now to the specific conservation targets that have been set for Ontario and the progress we have made to date.

Ontario's long-range target, now embodied in the IPSP, is to reduce peak electricity demand by 6,300 megawatts by 2025. This is almost one-quarter of today's peak demand, and it's a very ambitious target. If we are successful, conservation will eliminate 75 percent of the expected growth in peak demand by 2025. By contrast, the United States Action Plan for Energy Efficiency targets a 50-percent reduction in growth over the same period. California is expected to come out with a similar report soon, which also targets a 50-percent reduction.

Ontario also set interim targets of 1,350 megawatts of peak demand reduction by 2007, and a further 1,350 megawatts by 2010. These are, in a sense, base camps on a very arduous and challenging climb, and they are important measures of our progress.

So how have we performed against our target? I am pleased to report that Ontario electricity consumers have risen to the challenge. Analysis indicates that peak demand has been reduced by about 1,600 megawatts to the end of 2007, including megawatts of naturally occurring conservation that were included in the IPSP.

Given the factors I talked about earlier – the invisibility of electricity and the need to change entrenched habits of consumption – this is a significant and encouraging achievement. Many players have contributed, both those in the conservation market such as local distribution companies or LDCs, governments, natural gas companies, non-governmental organizations and energy management companies, and electricity users themselves, including homeowners, businesses, municipalities and institutions.

In sharing this information, I should explain that it is based on available results from the many players in the conservation market and includes only reported results. Clearly, we prefer verified results because they have less uncertainty associated with them. However, the methodologies of gathering and verifying the results of conservation programs are evolving, and verifying results also takes more time. More work in this area is underway.

More detailed results for 2007 will be included in the supplement to my annual report to be released next week. But I'd like to give you some brief highlights from the report, as reported to us:

- OPA-funded conservation programs, delivered by LDCs and other delivery agents, reduced peak demand by about 600 megawatts.

- In addition, conservation activities by LDCs not funded by the Ontario Power Authority have reduced peak demand by about 260 megawatts.
- Activities of other players, including natural gas companies, non-governmental organizations and federal and provincial governments, reduced peak demand by about 100 megawatts.

One clear message that has to be drawn from the progress we've made to this point is that we cannot rest on our laurels. We've successfully reached the first base camp, but we still have a very long way to go and a very hard climb ahead.

The long-term challenge – which translates into getting one in five electricity consumers off the grid by 2025 – remains as urgent as ever. The next interim target is a further reduction of 1,350 megawatts by 2010, and that will be an even greater challenge.

Looking ahead, the need to transform energy markets and create a genuine culture of conservation in Ontario will be critical to ensuring our future electricity reliability. By the end of this year, the OPA – under the leadership of my colleague, Paul Shervill, who heads up the conservation programming team – will have a very comprehensive portfolio of 26 conservation programs in place, with the financial resources to support them and an increasingly capable range of market participants and delivery channels to cover every sector in the province. The OPA will be spending about \$1.2 billion on conservation programs over the next three years, which will be funded through ratepayers' electricity bills.

One program you may be familiar with is that of BOMA Toronto, which is delivering a \$60 million program to deliver 150 megawatts of demand reduction over a three-year period from commercial buildings in Toronto. I'm pleased to see that as of last month, there were 80 projects submitted to the program, which represent 151 energy-efficiency measures being undertaken. This represents about 9,300 kilowatts of demand reduction and about 60 million kilowatt-hours of reduced consumption. It's also great to see that the participants in the program come from all real estate and company types, including larger and smaller commercial properties, large retail chains and entertainment venues, including some interest from the hospitality industry.

I encourage you to find out more about these programs – information is available on the table outside or you can speak to the program managers after the breakfast.

This now brings me to the critical third step in the think-believe-act progression: taking action. We need individuals, businesses and organizations in every area of activity to use energy wisely and not wastefully, to invest in more energy-efficient products, processes and practices, and to switch to renewable or cleaner fuels or generate their own electricity where they can.

I also want to promote and enlist your support for Ontario's first Energy Conservation Week, which kicked off yesterday and ends this coming Saturday. I believe this is a

tremendously important initiative that will build momentum in our drive to create a culture of conservation in Ontario, and it deserves your support.

As you may know, Energy Conservation Week is a province-wide initiative that is being coordinated by the OPA with the endorsement of the Ministry of Energy, and the support of the Independent Electricity System Operator. We have enlisted the active participation of many other organizations, in particular, local distribution companies and their association, the Electricity Distributor's Association, as well as businesses, community organizations and municipalities across the province. The goal is to make it a decentralized, grassroots effort in partnership with as many groups as possible.

The overarching objective of Energy Conservation Week is to give momentum to the creation of a culture of conservation by mobilizing all sectors of the electricity marketplace with a common purpose in a concentrated period of time. It's intended to build awareness, disseminate practical information and further the implementation of specific conservation measures to help reduce our peak demand this summer.

It's also worth noting that where other environmental awareness initiatives such as Earth Hour and Earth Day have been broadly and even internationally focused, Energy Conservation Week is specific to Ontario, focuses directly on Ontario's energy concerns and emphasizes direct, practical and immediate action.

We've seen some tremendous support from organizations across the province and right here in the GTA. In particular, if you are shopping this week in a Hudson's Bay Company store, you might notice that their lighting has been reduced by 25 percent for Energy Conservation Week. Or, if you are down on Front Street, notice that the Fairmont Royal York hotel has turned off its rooftop sign for the week.

As Ontario's Chief Energy Conservation Officer, I urge each of you, as business leaders in Toronto and the province as a whole, to lend your wholehearted support to Energy Conservation Week and to encourage everyone in your organizations to participate and act on the information and opportunities presented to them at work and at home. With your help, we can make it a success. In particular, I urge you to make use of the resources available on the Energy Conservation Week website, www.energyconservationweek.ca, including the Take Action checklist and the Think-Believe-Act video that can be downloaded and which is available here today as our gift to you.

And on this note, I'd like to conclude my remarks with a broader appeal to you to champion the cause of conservation whenever and wherever you can – to lead proactively, by example and by encouragement. The 3-E value of conservation refers to real, tangible benefits in three important areas:

- more jobs
- lower energy bills and
- environmental benefits.

As highly respected leaders in the business community, you are uniquely placed to help spread these messages and to translate awareness and belief into positive, constructive action. I know that many of you and the organizations you represent have already made strong contributions to the success we have had so far in meeting our first interim target in the long-range plan for Ontario. I thank and congratulate you for that.

I would now like to single out a few of those in our audience with some certificates of recognition for their leadership in energy conservation.

In alphabetical order, they are:

- the Energy Efficiency Contractors Network, represented by Chair/President Eryl Roberts, for providing training to all electrical contractors in the province and promoting the usage of energy-efficient products and services in their service offerings
- Hamilton Health Sciences, represented by Energy Manager Chris Cuthbert, for making the largest collection of energy upgrades throughout all of Canada to its family of hospitals
- the Toronto Region Conservation Authority, represented by Brian Denney, Chief Administrative Officer, for its new Restoration Services Centre, the highest-rated Leadership in Energy and Environmental Design or LEED platinum-certified building in the province
- the Toronto Star, represented by Environmental Manager Peter Tsilivas, for its leadership in encouraging the people of Toronto to fully embrace Earth Hour
- and the World Wildlife Fund, represented by Josh Laughren, Director of Communication, for mounting a spectacular lights-out event during Earth Hour 2008 that engaged and educated millions of Ontarians about the need for energy conservation. May every hour be Earth Hour.

I hope I can count on your ongoing support as we tackle the even greater challenges ahead. I encourage you to **think** about electricity, **believe** you can make a difference and **act** to use less. And then be noisy about it – tell your friends, your family, your suppliers, your customers, your employees, your community and your competitors, and then tell me so I can recognize you for your efforts.

Thank you for your attention this morning.