

*Energy Policy in Ontario – Some Perspectives on
the Road Ahead*

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It is a great pleasure to have the opportunity to speak to you this morning about Ontario's electricity future.

Ontario is at the crossroads. As a result of the phase-out of our coal-fired power plants by 2009 and the retirement of virtually all of our existing nuclear capacity by 2025, we now have the opportunity to dramatically change our electricity system.

Some people will tell you that we have no choice. They will tell you that if we don't re-invest in nuclear power, or coal power, then the lights will go out or the economy will shut down. This is simply not true.

In our view, the real debate is: Should we increase our electricity productivity up to New York State's level and move towards a 100% renewable electricity system for our grandchildren?

Or should we re-invest in nuclear power and remain heavily dependent on nuclear energy for decades to come?

We believe that Ontario should adopt the goal of moving towards a renewable electricity future for two reasons. First, it is the preferred option of the vast majority of the people of Ontario. Second, we believe that it is the lowest-cost and most-reliable strategy to keep the lights on. That is, we do not accept the proposition that there is a trade-off between going clean and green and a prosperous economy. On the contrary, we believe that going clean and green is the best way to increase our prosperity in the 21st century's global knowledge-based economy.

But first let's deal with nuclear power.

For those of you who watch too much TV, you will have seen the Canadian Nuclear Association's commercials that assert that nuclear power is clean, affordable and reliable. None of these claims are true.

In its recent report, the Ontario Power Authority compared the economics of nuclear power to that of a natural gas-fired power plant. The OPA analysed the costs of these two different options using three different rates of return on capital. Under 2 of the 3 scenarios, the OPA's analysis shows that gas-fired generation is lower cost than new nuclear. According to the OPA's analysis, nuclear power is the least cost solution if and only if the nuclear power plant can be 100% debt-financed at a 5% rate of return on capital. Let me repeat what I just said in case you can't believe your ears. According to the OPA's analysis, nuclear power is the least cost solution if and only if the nuclear power plant can be 100% debt-financed at a 5% rate of return on capital. Is there anyone in this room who thinks he can 100% debt-finance a multi-billion dollar nuclear power plant for a 5% rate of return? To ask the question is to answer it.

Now let's look at the reliability of our CANDU nuclear system. As a result of our heavy dependency on CANDU nuclear reactors, it took Ontario more than 8 days to fully recover from the August 2003 blackout versus less than 2 days for New York State.

In addition, during the summer of 2005, as a result of the failure of 3,000 MW of our nuclear capacity to produce electricity, the IESO was required to repeatedly activate emergency control actions to keep the lights on in Ontario. These included issuing Public Appeals for customers to reduce their use of electricity on 12 days and implementing sustained 5% voltage reductions on August 3rd and 4th.

Finally, nuclear power is not clean. As a result of the poor performance of our nuclear reactors, OPG had to increase the output of its coal-fired power plants by 120% between 1995 and 2003 to keep the lights on.

In short, Ontario's electricity system has lurched from crisis to crisis during the last 40 years because of our heavy dependency on nuclear power.

Instead of re-investing in tried and failed nuclear power, it's time to choose what works for a change.

So how can we move towards a renewable electricity future for Ontario? We are proposing a three-pronged strategy.

1. We must increase our electricity productivity up to New York State's level. Ontario is one of the most wasteful jurisdictions in the world in terms of electricity consumption. For example, New York State's electricity productivity is 2.3 times higher than Ontario's. If we could achieve New York State's level of electricity productivity by 2025, our total electricity consumption would fall by 20%. Increasing our electricity productivity is the best option for moving towards a renewable electricity future since it also reduces electricity bills, makes our industries more competitive and raises our standard of living. The days of abundant, low-cost, untapped, waterpower are over for Ontario. We no longer have low-cost sources of new supply. The only sustainable option to make Ontario's industries more competitive is to increase their electricity productivity.
2. The second prong of our strategy is to bring on more renewable supplies including water power, wind-power, biomass power, solar and geothermal.
3. The third and final prong of our strategy is to use high-efficiency natural gas-fired generation as a transition technology. A natural gas-fired combined heat and power plant can have energy efficiencies of 80 to 90% versus the 30% efficiency of a nuclear reactor. We must create a thousand points of light across our great province by turning our shopping centres, our office towers, our condos and our factories into small-scale power plants.

But the final and most important question is: How can we turn our vision into reality? Our answer is simple: we must adopt market-based solutions.

Let me give you a few examples.

1. Last summer we imported up to 3,000 MW of high-cost coal-fired electricity from the Ohio Valley on smog alert days. Instead of sending our money to the Ohio Valley on smog days, Premier McGuinty should direct the IESO to start paying Ontario consumers to shift some of their demands from peak to off-peak periods. Instead of sending our dollars to the U.S., let's pay Falconbridge, Abitibi, Magna and Toronto Hydro to shift some of their demands from peak to off-peak periods on smog alert days.
2. The Ontario Energy Board has linked the profits of our municipal electric utilities to their success at reducing their customers' bills by making them more energy efficient. As a result, we now have over 80 conservation utilities in Ontario. And I am pleased to note that David Miller's Toronto Hydro has become Ontario's #1 conservation leader by committing to reduce its customers' demands by 5% by 2007. The OEB now needs to increase the electric utilities' conservation budgets so that they can achieve even greater bill savings for their customers.
3. The Government should direct the OPA to contract for an extra 1,200 MW of new renewable power during each of the next 5 years from energy co-ops, municipal utilities and investor-owned companies.
4. The Government should direct the OPA to contract for an extra 1,000 MW of new combined heat and power during each of the next 5 years.
5. In addition, Finance Minister Duncan should exempt new combined heat and power projects from the 0.7 cent per kWh nuclear debt retirement charge.
6. Finally, the Government should direct the OPA to develop a long-term strategy to raise the price of electricity up to its full cost without raising the electricity bills of consumers or impairing the competitiveness of Ontario's industries.

If Premier McGuinty implements these recommendations, we firmly believe that Ontario will have no need to re-invest in nuclear power. However, if the Premier believes that new nuclear reactors are a desirable option for Ontario, he should subject all nuclear power proposals to the following market rules.

First, to protect Ontario consumers, he should only consider proposals for new nuclear reactors from investor-owned power companies.

Second, all proposals for new nuclear reactors must be required to compete on a level playing field with renewable and natural gas-fired power plants.

Third, nuclear power companies, like gas and renewable power companies, must not be allowed to pass their capital cost overruns on to the OPA or electricity consumers.

Fourth, nuclear power companies, like gas power companies, that fail to achieve their annual capacity utilization targets should be subject to strict financial penalties.

Fifth, nuclear power companies, like renewable and gas power companies, should be 100% responsible for their decommissioning and waste disposal costs.

Conclusion

In conclusion, I would like to remind you that at the beginning of the last century, Sir Adam Beck and Ontario Hydro did two very important things. First, they phased-out Ontario's dirty coal-fired power plants for the first time. And second, they created a virtually 100% renewable electricity system for Ontario that lasted for almost half a century.

With the closing of our dirty coal plants and the retirement of our aging and unreliable nuclear stations, we now have the opportunity to, once again, create an ecologically and financially sustainable 100% renewable electricity system for our grandchildren.

That is, once again, we have the opportunity to create an electricity system for Ontario that is the envy of the world

We must not lack the will.

Thank you for your attention.