

Ontario's Energy Conservation & Efficiency Budget versus the Darlington Re-Build Project

Ontario Power Generation's (OPG) "high confidence" estimate for the cost of power from a re-built Darlington Nuclear Station is 8.9 cents per kilowatt-hour (kWh).¹ On the other hand, the Ontario Power Authority is currently planning to pay just 2 to 4 cents per kWh for conservation savings in the commercial-industrial sector.²

But despite the fact that the cost of avoiding the need to generate a kWh of electricity is as little as one-fifth the cost of producing power by re-building our aging nuclear reactors, the Government of Ontario has budgeted just \$2.4 billion for purchasing these conservation "negawatts" over the next six years³ compared to the \$12.9 billion OPG is planning to spend on its Darlington Re-Build Project.⁴ In other words, the cost of re-building Darlington will be at least 5.4 times greater than Ontario's total budget for purchasing energy conservation and efficiency savings.

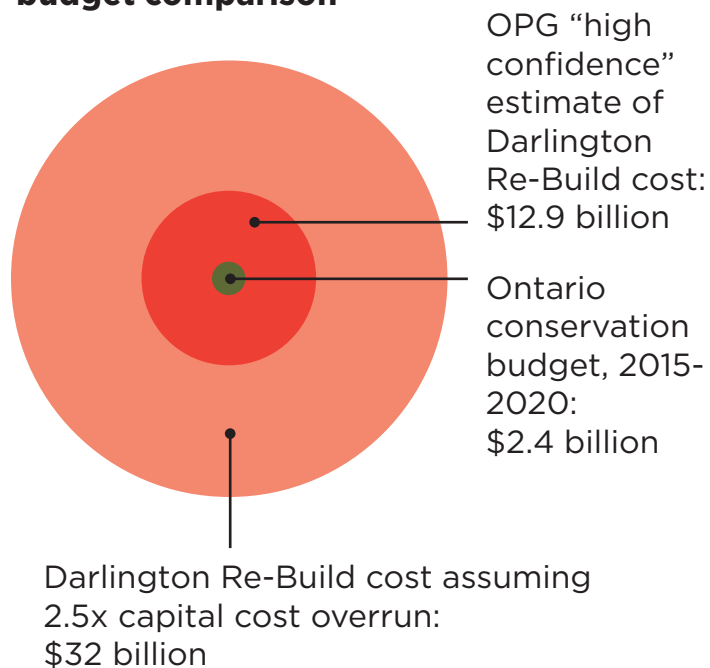
This ratio becomes even more lopsided if we factor in what is likely to be the real cost of the Darlington project. Every nuclear project in Ontario's history has gone massively over budget — on average by 2.5 times.⁵ If the Darlington project follows suit (and OPG admits it is already \$300 million over budget), the real cost of power from Darlington will be 16.6 cents per kWh.⁶ This means that power from Darlington will cost roughly 4 to 8 times more than power saved through greater industrial-commercial efficiency.

This would also, of course, make the capital spending ratio even more lopsided, meaning that spending on conservation would be equal to less than one-tenth of the budget for re-building Darlington.

Of course, paying industries and other businesses to improve their energy efficiency has many additional

... continued over

Conservation vs. Darlington Re-Build budget comparison



Cost per kilowatt hour (kWh)

Efficiency: 2-4¢/ kWh	OPG "high confidence" Darlington Re-Build estimate: 8.9¢/ kWh	2.5x cost overrun for Darlington Re-Build: 16.6¢/ kWh
-----------------------	---	---



benefits, including jobs in facility upgrades and in expanded businesses, greater competitiveness thanks to lower costs, and lower air polluting and climate destabilizing emissions. On the other hand, another huge capital cost overrun on a nuclear project will add to ratepayer costs and the provincial debt, as OPG expects the Government of Ontario to provide its project financing.

The bottom line is that for every kWh of power that we save through improved efficiency, we can reduce our costs by 55-88% compared to the cost of re-building Darlington.

Endnotes

1. Ontario Clean Air Alliance Research Inc., *Ontario's Electricity Options: A Cost Comparison*, (October 1, 2014).
2. The Ontario Power Authority (OPA) pays business consumers up to 20 cents per kWh for each kWh that their energy conservation and efficiency investments save *during the first year* of their operation. Assuming that these investments actually deliver savings for at least 5 to 10 years, a payment of 20 cents per kWh saved *during the first year* is equivalent to an average annual payment of 2 to 4 cents per kWh saved.
3. Ontario Power Authority, *Conservation First Framework Update: Presentation to SAC*, (June 24, 2014), page 7.
4. Ontario Energy Board Docket No. EB-2013-0321, Exhibit L, Tab 4.7, Schedule 6 ED-005.
5. Ontario Clean Air Alliance Research Inc., *The Darlington Re-Build Consumer Protection Plan*, (September, 2010), Appendix A.
6. Ontario Energy Board Docket No. EB-2013-0321, Undertaking J14.2.



ONTARIO
CLEAN AIR
ALLIANCE
RESEARCH

CleanAirAlliance.org