Making the most of our efficiency potential to lower rates

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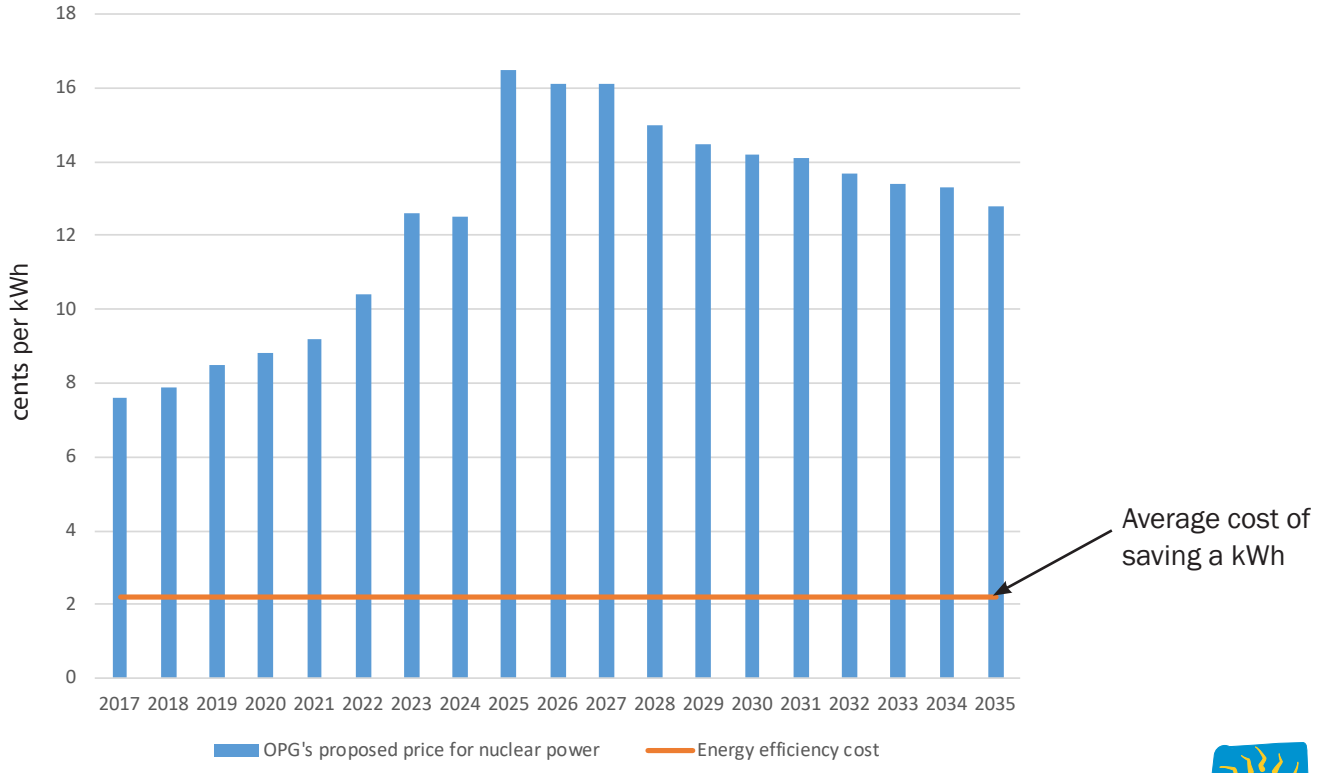
In December 2013, the Government of Ontario adopted the Conservation First principle for energy planning. This principle means that Ontario intends to procure all energy conservation and efficiency resources that can keep our lights on at a cost that is less than or equal to the cost of new supply.[1]

To be consistent with this principle, the Independent Electricity System Operator (IESO) should be willing to pay at least as much to save a kWh as Ontario's consumers will pay for the re-building of the Darlington Nuclear Station.

Figure 1 compares the average cost of the IESO's conservation programs in 2016 to Ontario Power Generation's (OPG's) proposed prices for nuclear power to pay for the re-building of Darlington.

Figure 1: Average Cost of Saving a kWh vs. OPG's Proposed Nuclear Rates[2]



As Figure 1 shows the cost of saving electricity (2.2 cents per kWh) is 71-87% less than OPG's forecast of the cost of continuing to remain dependent on our aging nuclear reactors. In this context, it is important to remember that the nuclear industry's forecasts have always been overly optimistic. In fact, every nuclear project in Ontario's history has been late and has gone massively over budget — on average by 2.5 times.[3]

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Therefore, if the Government of Ontario is going to remain committed to the Conservation First principle while also planning to re-build ten of our aging nuclear reactors, it makes sense to pay up to 16.5 cents per kWh for electricity savings that will minimize the need for these high-cost sources of new electricity supply. Each kWh of electricity savings that can be obtained at a cost of less than 7.6 to 16.5 cents per kWh will lead to lower electricity bills for all consumers.

It makes no sense to under pay for energy efficiency while over paying for nuclear energy

Fortunately, Ontario has a huge untapped energy efficiency potential. According to a report prepared for the IESO, energy efficiency investments can cost-effectively reduce the province's total electricity consumption by 31% by 2035.[4]

Recommendations

- The Minister of Energy should direct the IESO to put Conservation First into practice by paying up to 16.5 cents per kWh for electricity savings that can help to defer and/or eliminate the need to re-build our aging nuclear reactors.
- The Minister of Energy should direct the IESO to establish a competitive procurement process to obtain electricity savings from municipalities, co-ops (e.g., Green Communities Canada), First Nations communities, electric and gas utilities, district energy companies (e.g., Enwave, Markham District Energy), energy-efficient appliance and equipment manufacturers and distributors, and other corporations (e.g., Brookfield Global Energy Solutions, Rodan Energy Solutions).

Endnotes

1 Ontario Ministry of Energy, *Achieving Balance: Ontario's Long-Term Energy Plan*, (December 2013), pages 3 and 20.

2 Navigant Consulting Ltd., *Conservation Framework Mid-Term Review: Budgets, Targets, Cost Effectiveness – Phase 2*, (September 21, 2017), Prepared for the IESO, page 40; and Ontario Energy Board Docket No. EB-2016-0152, Exhibit N3, Tab 1, Schedule 1, Attachment 2, Table 14.

3 Ontario Clean Air Alliance Research Inc., *The Darlington Re-Build Consumer Protection Plan*, (September 23, 2010), Appendix A.

4 Nexant, *Achievable Potential Study: Long Term Analysis*, (June 30, 2016), pages 3 & 4.

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