

Visit globeandmail.com/adv/researchandinnovation/2015

OPINION

Pickering Nuclear Generating Station can continue to deliver economic and environmental value



By Don MacKinnon,
President, Power Workers' Union

Greenhouse gas emissions (GHG) from Ontario's electricity sector are expected to more than double from 2014 levels, and could negate the reductions already achieved by closing the province's coal stations. Ontario's growing dependence upon carbon-emitting natural gas-fired generation in the next decade is particularly concerning as more and more of this fuel comes from environmentally-questionable shale gas. Carbon pricing, likely in the form of a Cap and Trade program with Quebec and California, will bring new cost pressures for residential, commercial and industrial electricity consumers if Ontario's carbon emissions rise.

In the coming months, as the province's 2013 Long-Term Energy Plan is being updated, Ontario's decision-makers will need to address these and some other critical challenges. Besides meeting the province's GHG targets and ensuring system reliability, Ontarians will expect to see rising electricity prices kept in check and a healthy and expanding economy that sustains existing jobs and creates new ones.

Ontario's Independent Electricity System Operator (IESO) has identified a 2,000 to 3,000 megawatt shortfall in reliability reserve capacity resulting from the scheduled closure of the 3,100 megawatt Pickering Nuclear Generating Station in 2020 that will persist beyond 2032. As part of an interconnected power system, Ontario must fill this shortfall to comply with the reliability requirements of the North American Electricity Reliability Corporation and the Northeast Power Coordinating Council Inc.

A recent analysis by Strategic Policy Economics (Strapolec) demonstrates that extending the operation of the Pickering Nuclear Station for four years is a near-term, low-cost option that can help address all of these challenges. Moreover, this option keeps more dollars in Ontario while significantly improving the province's energy security.

The Strapolec analysis demonstrates that continuing operations at the Pickering Nuclear Station will displace natural gas generation helping to avoid over 18 million tonnes of GHG emissions over a four year period. That's the equivalent of taking about 3 million vehicles off the road. Without the continued operation of Pickering, Strapolec predicts Ontario's increased reliance on natural gas-fired generation will increase the overall consumption of natural gas in Ontario by 25 percent.

In addition to producing electricity, Ontario uses natural gas for heating and industrial applications. Over 99 percent of this natural gas is imported, which exposes Ontarians to significant natural gas price volatility. President Obama's Clean Energy Plan, which is causing a major shift in U.S. dependency on coal generation to natural gas, can be expected to exacerbate this volatility.

Since operating the Pickering facility is 25 per cent less expensive than natural gas generation, Ontario's electricity system costs will be reduced by over \$600-million over four years. The analysis also estimates an additional \$950-million in avoided natural gas generation risks.

Overall, Strapolec modeling shows \$7-billion in net new economic benefit to Ontario and 40,000 additional person years of employment. By continuing the operation of the Pickering Nuclear Station, Ontario, saves \$4-billion from avoided energy imports. Durham Region, where Ontario Power Generation (OPG) is the largest employer, retains \$1.2-billion of economic activity. The Government of Ontario could realize over \$1.1-billion in additional revenues from an increase in GDP and cost savings at OPG.

Strapolec suggests that Ontario's industrial and residential ratepayers

should also see a benefit with comparative rates lower by four per cent and one percent respectively.

Continuing to operate reactors at

the Pickering generating plant for a four-year period can deliver substantial environmental and economic benefits.

Achieving these outcomes requires the

Government of Ontario to direct the Minister of Energy, the IESO and OPG to consult with the Canadian Nuclear Safety Commission for the purpose

of securing approval for the longest possible period of continued safe operation of the Pickering Nuclear Generating Station beyond 2020.

Extending the Operation of the Pickering Nuclear Station Can Deliver Significant Environmental and Economic Benefits

Ontario is facing some tough challenges.

Our province needs to:

- Address a reliability reserve capacity shortfall
- Reduce its greenhouse gas (GHG) emissions
- Keep electricity prices affordable
- Grow our economy and the number of good Ontario jobs

Safely operating the Pickering Nuclear Station for an additional four years to 2025 is a cost-effective solution that ticks all the boxes and more:

- Provides 3100 megawatts of safe, clean, reliable and affordable electricity
- Avoids 18 million tonnes of GHG emissions
- Reduces electricity system costs by more than \$600 million (lower industrial and residential rates by 4% and 1% respectively)
- Supports an additional 40,000 person years of employment
- Delivers \$7 billion (B) in economic benefits to Ontario, \$1.2 B of that in Durham Region
- Increases Government of Ontario revenues by \$1.1 B

The PWU takes great pride in representing the majority—over 15,000 strong—of the men and women who are on the job 24/7 to produce and deliver electricity in Ontario.

For more information please go to: www.pwu.ca

FROM THE MEN AND WOMEN WHO HELP KEEP THE LIGHTS ON.

