A Secure Energy Future for Ontario Requires More Investment in Nuclear and Biomass Today



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This year's long, cold winter underscores the risks of Ontario's increasing dependence on natural gas to meet our energy needs. Prolonged periods of frigid weather across North America increased natural gas consumption for both home heating and electricity generation. In turn, this drove the cost of natural gas higher, as evidenced by the 40 percent increase in the price Ontarians will pay for this commodity effective April 1, 2014. Ontario imports 99 percent of its natural gas supply. Limiting price volatile gas generation to peak needs makes sense for Ontario's electricity prices, greenhouse gas (GHG) emissions and energy security.

Most of Ontario's commercially viable hydroelectric potential has already been developed, leaving GHG emission-free base-load nuclear and carbonneutral biomass as our best energy options. The province's planned mid-life refurbishment of six nuclear reactors will be the key to Ontario's energy security. However that program will be dependent upon the budget and scheduling performance from the work on the first two reactors. Ontario has also

deferred building two new reactors that would help replace 3,000 megawatts of clean electricity from the Pickering Nuclear Generating Station scheduled to close in 2020. As well, Ontario has not yet committed to the low-cost option of converting the idle Nanticoke and Lambton coal stations to renewable, domestically sourced biomass and natural gas to meet peak electricity demand.

Several analyses show that investments in these provincially owned assets would deliver significant economic and environmental benefits. Ontario hosts most of Canada's nuclear industry and its 60,000 jobs, supply chain companies and associated R&D. A recent study by Strapolec projected that instead of more wind generation, refurbishing all six reactors and building two new reactors would result in: 108 million tonnes greater GHG emission reductions; a comparative savings of \$38 billion (B) in electricity costs for residential consumers: and contribute \$60 B and 100,000 more jobs to Ontario's economy. Converting Ontario's coal stations and establishing the associated biomass fuel supply infrastructure would create thousands of jobs and contribute about \$600 million annually to the province's GDP.

Leveraging Ontario's nuclear and biomass advantages is the best alternative to ensure our province has reliable, affordable and secure lowcarbon electricity to power its economic future.