

June 15, 2016

The Honourable Glenn Thibeault Minister of Energy 4th Floor, Hearst Block 900 Bay Street Toronto, Ontario M7A 2E1

Re: Implementing the *Climate Change Action Plan* through the *Long Term Energy Plan*

Dear Minister Thibeault,

Congratulations on your appointment as Minister of Energy.

Your appointment comes at an exciting time. The government's recently released *Climate Change Action Plan* envisions transforming Ontario into a low-carbon society by mid-century. We hope we can work together to ensure the government's vision can be fulfilled.

As acknowledged in the plan, "Fighting climate change means transforming the way we live, move and work." This also means transforming how and who produces energy in Ontario. Without a doubt, your leadership as Minister of Energy will be crucial in guiding this transition.

In our view, this transition must begin with the next iteration of the province's Long-Term Energy Plan (LTEP). Your predecessor requested recommendations on the scope of the upcoming LTEP review. Please accept this letter as our recommendations on the scope of the LTEP review.

Long-Term Energy Plan

We believe implementing the *Climate Change Action Plan* requires significant changes to the scope, focus, flexibility, and values of the next LTEP.

In the past, Ontarians have been treated like passive energy consumers. But, as laid out in the *Climate Change Action Plan*, Ontarians and Ontario communities will need

to actively consume, generate, conserve and store energy if we are to successfully fight climate change. Ontario is not alone in this thinking: in the run up to the climate conference in Paris last year, nearly 1000 city mayors from around the globe committed to transition their communities to 100% renewable energy by midcentury.

In Ontario, however, we have just started thinking about how we will plan and govern such a significant energy transition. The government's three previous LTEPs (formerly referred to as Integrated Power System Plans (IPSP)) focused only on what Ontario has always done historically: balancing supply from large-centralized power stations with projected demand on the bulk electricity system.

Your leadership will be needed to ensure government planners adapt and propose solutions to new uncharted regulatory realities regarding the envisioned decentralized energy system, defuse resistance from incumbent industry stakeholders who oppose a shift in energy systems, and help those incumbents transition to the new market realities. At the same time, you will need to enable broad citizen and community participation in Ontario's energy system.

As laid out in the *Climate Change Action Plan*, we need to transform our energy system. We think implementing the following recommendations in the upcoming LTEP review will help enable this transformation and implement the government's long-term climate change objectives.

Conservation First

Your government has adopted a commendable policy of "Conservation First". This policy should be emphasized in the upcoming LTEP review.

The *Climate Change Action Plan* calls for transitioning to an electric-powered transportation system over the next several decades. This will undoubtedly increase electricity demand in the long-term but may also put new strains on local distribution systems. On the other hand, the plan also foresees empowering families to reduce their energy consumption while retrofitting schools and low-income housing.

We recommend the Independent Electricity System Operator (IESO) be directed to make energy conservation and efficiency a priority in its technical report.

Climate Resilience and Adaption

As highlighted by the 2013 ice storm and the 2003 blackout, Ontario's centralized electricity system is vulnerable to disruption. Major outages hurt Ontario's economy and put the health and safety of Ontarians at risk. In the coming decades, climate models predict increasingly erratic weather. The vulnerability of our

centralized electricity system to climate disruption has not been considered in previous LTEP reviews. It should be considered in the upcoming LTEP review.

While the *Climate Change Action Plan* seeks to fight climate change, we also need to ensure our communities are resilient enough to cope with climate change impacts. This is an opportunity. The community-based energy system envisioned in the government's *Climate Change Action Plan* is also more resilient. The analysis of energy supply sources should include consideration of the avoided costs of disruptions provided by local clean supply. Building more resilience into Ontario's electricity system would also complement the mandate of the Ministry of Community Safety to update and adapt provincial emergency response plans "to the growing impacts of climate change."

We recommend that the LTEP review should affirm climate resilience as a value incorporated into system planning. We recommend the IESO be directed to assess and report on the avoided costs provided by increased reliance on local renewable energy sources. It should also report on sensitive infrastructure, such as hospitals, schools and public transit, that could be retrofitted.

Public and Community Participation in Ontario's Electricity System

The LTEP process needs to reflect the clear policy direction in the *Climate Change Action Plan* that the participation of Ontario communities, businesses, schools and families is essential if we are to transform our energy system and lower our dependence on fossil fuels. This is the right approach. A successful energy transition does not simply entail switching technologies, but also requires shifts in social expectations about energy and business models.

Historically, only a few large companies produced and distributed power. Jobs were concentrated at large power plants. Regulatory models deterred citizens from generating energy. The *Climate Change Action Plan*, however, foresees flipping this centralized model on its head. It foresees making Ontario the "easiest" and "most affordable" place in North America for homeowners to install solar panels or energy storage. It seeks to enable community institutions like schools, universities and small businesses to also generate renewable energy.

The increasing participation of citizens, community organizations, cooperatives, municipalities and local businesses will increasingly challenge traditional regulatory systems and business models. This will, of course, require government guidance. While this new civic energy sector will create jobs and financial benefits across the province, the government currently assesses the social and financial benefits of our energy system from the perspective of large power plants with large workforces.

The IESO's reporting requirements should be changed. Understanding and supporting these new civic energy producers will be essential for successfully

transforming our energy system in the long-term. In short, we need new metrics to track the transition and communicate its benefits to Ontarians. This would include tracking jobs in the conservation and energy efficiency sector, households who produce their own power, membership in energy cooperatives, and farmers and communities who derive benefits from renewables facilities.

We recommend directing the IESO to estimate and report on citizen and community participation in Ontario's energy system.

Taking Advantage of the Declining Cost of Renewables and Storage

The new LTEP process must be based on credible cost estimates for different supply alternatives.

The cost of renewable energy and energy storage systems is declining rapidly. The Ontario Power Authority (OPA) disregarded this downward trend in its previous LTEP reviews and improperly assumed the cost of solar, renewables and storage would remain constant.

At the same time, the OPA has relied on speculative and highly controversial industry-produced cost forecasts for new and rebuilt nuclear stations, which do not account for the history of nuclear cost escalation.

These incorrect assumptions skew long-term energy planning decisions by favouring costly nuclear power, rather than affordable and safer renewable energy options.

We recommend directing the IESO to report on the long-term forecast trends in renewable energy and storage costs in its technical report. The IESO should also be directed to take these long-term forecasts into consideration when assessing the desirability of long lead time energy projects, such as nuclear reactor life-extensions.

Keeping the Door Open to Renewables: Meaningful Nuclear Off-ramps

To ensure Ontario is ready to take advantage of innovation in the clean-tech sector, the next LTEP needs to create the conditions where the choice to take an "off-ramp" from planned reactor life-extension projects is feasible and viable. This requires increased transparency, public participation and the preparation of alternate energy plans.

Under previous LTEP reviews, Ontario committed to rebuilding ten reactors at the Darlington and Bruce nuclear stations. While an increasing number of municipalities and jurisdictions worldwide are seeking to switch to 100% renewable energy over the next forty years, Ontario committed to maintaining centralized nuclear generation at historic levels.

This commitment to nuclear power will severely limit the expansion of increasingly affordable clean-tech energy options and, in our view, undermine the vision outlined in the *Climate Change Action Plan*. Indeed, in a report following the passage of the *Green Energy and Economy Act* in 2009, OPA staff informed the agency's board of directors that expansion of renewable energy was limited by existing nuclear commitments:

In effect, renewable supply and nuclear are "competing" for the same space in the time period beyond 2016. Stated another way, the amount of renewables that can be accommodated depends on the amount of nuclear generation in the mixⁱ.

We are deeply concerned that the 2013 LTEP's commitment to rebuild ten reactors will stall the transformative change called for in the *Climate Change Action Plan*. As noted, the cost of renewable energy, storage and other clean-tech energy options is declining rapidly. Expanding Ontario's reliance on renewable energy and local clean-tech generation is an opportunity for lowering electricity system costs, empowering Ontarians to participate in the fight against climate change, and building more resilient communities. In light of the innovation taking place in the clean-tech sector, energy system planning needs to be flexible and ready to adapt to new opportunities.

In this context, we believe the next LTEP needs to create the conditions where decisions can be made to initiate off-ramps from the Darlington and Bruce life-extension projects over the next fifteen years. This requires increased levels of transparency and the regular preparation of alternative scenarios to reactor life-extension. We also believe each off-ramp decision should be publicly scrutinized through an Ontario Energy Board review outside of long-term energy plan reviews.

Regarding transparency, the Premier has directed cabinet to make Ontario "the most open and transparent government in the country." In our view, there has been a lack of transparency related to reactor life-extension that should be addressed as part of the next LTEP review. For example, the IESO has prepared alternative scenarios to the Bruce life-extension, but has refused to release them under the *Freedom of Information and Protection of Privacy Act.* We request these alternative scenarios be released as part of the IESO technical report.

We recommend directing the IESO to release its alternative assessments for the life-extensions currently planned at the Bruce nuclear station as part of its technical report. This should include the cost criteria that will be used to assess whether off-ramps can be taken under the Bruce Power Refurbishment Implementation Agreement (BPRIA). The IESO's technical report should also clearly indicate when off-ramp decisions are scheduled under the BPRIA and as part of the government-approved Darlington refurbishment project.

Planning for Pickering's End-of-Life

The 2013 LTEP foresaw operating the Pickering nuclear station beyond its design life until 2020, but contemplated the possibility of closing the station earlier "depending on projected demand going forward, the progress of the fleet refurbishment program, and the timely completion of the Clarington Transformer Station." We were thus surprised when the government announced in January that it would allow Pickering to operate until 2024.

However, Pickering's continued operation is far from certain. The Canadian Nuclear Safety Commission (CNSC) is not set to assess the safety case supporting continued operations until 2018. What's more, OPG's most recent quarterly report also admits that: "There is a risk that the station's extended operation to 2024 may be determined to be uneconomical to pursue." In this context, the LTEP needs to prepare for the foreseeable possibility that Pickering may close in 2020 or earlier. In our view, Pickering's closure is an opportunity to accelerate the deployment of renewable energy and conservation.

We recommend directing the IESO to include scenarios assuming Pickering's closure in 2020 (or earlier) in its technical report.

Public Access to Information

During the passage of Bill 135, our organizations voiced concerns that proposed changes to the long-term energy planning process would deprive public interest organizations of the capacity to meaningfully scrutinize data and recommendations provided by the IESO. We encourage you to ensure civil society groups have the ability to meaningfully scrutinize IESO's technical report as part of the upcoming LTEP review.

Specifically, the new planning process has removed the ability for public-interest organizations to submit interrogatories to the IESO during an Ontario Energy Board hearing and to hire expert witnesses to provide advice. We think the ability to question and clarify the assumptions underpinning the IESO's technical report is essential for building a common understanding of the energy options available to Ontario.

We recommend directing the IESO to accept interrogatories to clarify the assumptions and data provided in its technical report. This could be done through an expedited OEB hearing or through a technical conference. Moreover, public-interest organizations should be able to apply for funding to hire experts for the LTEP process.

Conclusion

Congratulations on your appointment as Minister of Energy. We'd be happy to meet with you to discuss these issues further at your earliest convenience.

We look forward to working with you to reframe the focus, scope and values of the LTEP to implement the government's *Climate Change Action Plan*.

Truly,

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CC:

Kathleen Wynne, Premier of Ontario Glen Murray, the Minister of Environment and Climate Change

ⁱ Ontario Power Authority, *Planning in the Context of the Green Energy Act: Board of Directors Report,* April 7, 2009, Acquired through Freedom of Information.

ii Freedom of Information request 15-050, IESO.