ontario chamber of commerce
2105-180 Dundas Street West
Toronto, ON, M5G1Z8
occ.ca | @OntarioCofC

May 12, 2023

The Hon. Todd Smith
Ministry of Energy, Energy Supply Policy Division
7th floor, 77 Grenville Street
Toronto, ON
M7A 2C1

Re: Pathways to Decarbonization (ERO 019-6647)

Dear Minister Smith,

For more than a century, the Ontario Chamber of Commerce (OCC) has supported economic growth by advocating for business priorities on behalf of our 60,000 members, including local chambers of commerce and boards of trades in over 157 communities.

Late last year, the Independent Electricity System Operator (IESO) released its *Pathways to Decarbonization Study* in response to the Minister of Energy's request to evaluate a moratorium on the procurement of new natural gas-fired generation and develop an achievable pathway to zero emissions in the electricity sector.

The OCC welcomes the opportunity to provide feedback on the recommendations in the IESO's report, on behalf of Ontario's business community.

Regulatory Approvals: What are your thoughts on the appropriate regulatory requirements to achieve accelerated infrastructure buildout? Do you have specific ideas on how to streamline these processes?

- Ontario's world-class environmental and safety standards must continue to be protected through robust impact assessments. However, there are areas in which the regulatory approvals process is outdated, duplicative, and/or lacks clarity.
- With respect to impact assessments, the Ontario government should:
    - Ensure previously approved environmental and safety studies on existing sites and projects be accepted as baseline studies for their expansion or continued operation.
    - Harmonize federal and provincial regulations, where possible, and recognize efforts made by project proponents at other levels of government. For instance, a federal environmental impact assessment done for a project in Ontario should also form the basis for approval through the provincial process.
- Further, leave to construct (LTC) regulations for gas distribution pipelines are resulting in excessive costs and delays, as they have not kept pace with inflation or the complexities of modern infrastructure projects. We recommend increasing the thresholds above which LTC consideration is

required (to $10 million in cost, pipe size NPS 16, and operating pressure of 3,600 kPa). Increasing LTC thresholds would help expedite the permitting process without removing the need for consultation or environmental approvals. Ontario should also build in a five-year review of LTC considerations to ensure they remain up-to-date and competitive.

- Ontario should continue to prioritize the establishment of market rules, permitting guidelines, and approval processes for battery and water storage, hydrogen production, and underground storage projects, with the aim of finalizing regulatory frameworks this Fall. Without clarity, risk is priced into contracts and those projects become uncompetitive.

- While efforts are made to streamline regulatory approvals, it is important to maintain the integrity of the process. In some cases, Ontario's self-regulated engineering regulator lacks the clarity of purpose and the required checks and balances needed to ensure practitioners are following established protocols and best industry practices. This can undermine the process and put compliant businesses at a competitive disadvantage.

Engagement & Consultations: What are your expectations for early engagement and public or Indigenous consultations regarding the planning and siting of new generation and storage facilities?

- Engagement with impacted communities is a critical prerequisite for the siting of any energy asset. At the same time, the consultation process must be efficient to avoid adding unnecessary costs or delays that deter further investments in critical energy infrastructure.

- With regard to Indigenous communities, consultations should be held early and often, in a manner consistent with the Truth and Reconciliation Commission's Calls to Action and the United Nations Declaration on the Rights of Indigenous Peoples. Ideally, engagements should be led by Indigenous-owned businesses with an understanding of proper protocols.

  Partnerships should also be pursued, with First Nations serving as proponents and/or equity shareholders in major infrastructure projects. Meaningful partnerships ensure projects are developed around Indigenous principles of land stewardship, with continuous engagement throughout the life cycle of projects and long-term benefits in line with economic reconciliation. Examples include the Oneida Energy Storage Project and Hydro One's shared equity partnership model for new large-scale capital transmission lines. Additional opportunities for such partnerships will likely be unlocked from the federal government's recent move to enable the Canada Infrastructure Bank (CIB) to provide loans to Indigenous communities to support them in purchasing equity stakes in infrastructure projects in which the CIB is also investing.

- Meanwhile, consultations at the community level are sometimes held back by concerns about the local economic and environmental impacts of new projects. While addressing specific concerns is often an iterative process, the consultative process can be made more effective by building greater awareness among the general public about the importance of siting new resources, the safety record of these projects, and their regional economic benefits. There is a role that both government and

industry can play in providing that information and education.

Natural Gas: Do you believe additional investment in clean energy resources should be made in the short term to reduce the energy production of natural gas plants, even if this will increase costs to the electricity system and ratepayers?

- Through long-term planning, the Ontario government's role is to define clear objectives – related to reliability, affordability, and sustainability – while allowing the IESO and sector stakeholders to pursue the mix of resources that will best achieve those objectives.

  Importantly, there is also a need for greater coordination between electricity and gas within forecasting and planning processes to ensure the most cost-effective, reliable, and resilient pathways are pursued.

- We know from the IESO's Pathways Study and previous Natural Gas Phase-Out Study that natural gas-fired generation will need to continue to play an important role in our energy system to ensure reliability in the short to medium term, as there is no like-for-like replacement for the continuous, flexible energy that Ontario's natural gas fleet is capable of providing under all weather conditions, and it will take several years to plan for and build additional resources.

- Even with natural gas-fired generation in the mix, electricity accounts for less than three percent of Ontario's total greenhouse gas emissions, with the vast majority of emissions coming from transportation, industry, and buildings. As such, decarbonization efforts should primarily target those sectors.

- This is not mutually exclusive with actively pursuing clean energy alternatives, including both existing assets (such as hydroelectricity, nuclear, and renewable energy), and emerging technologies (such as hydrogen and small modular reactors). Further development of energy storage technologies will enable a variety of intermittent resources to play a greater role in the system over time.

- Alternative fuel technologies – such as hydrogen-fired peaking gas plants – should be explored as cost-effective means to reducing emissions from Ontario's gas fleet. Carbon capture, utilization, and storage will also play a role in decarbonizing gas generation and facilitating hydrogen production.

- To encourage private sector investments in clean energy technologies, your government should:
  - Provide clear direction around environmental objectives as part of Ontario's long-term energy planning to de-risk and inform stakeholders' investments and procurements of emerging technologies.
  - Support the research, development, and commercialization of clean energy technologies through a combination of direct funding, regulatory modernization, and tax incentives.
  - Continue providing the IESO and Ontario Energy Board (OEB) with the mandates and tools needed to enable participation of more technologies by updating the electricity market and regulatory frameworks.

System Costs: Are you concerned with potential cost impacts associated with the investments needed in new electricity infrastructure due to increasing demand? Do you have any specific ideas on how to reduce costs of new clean electricity infrastructure?

- Ontario's energy system should seek to balance affordability, reliability, and climate-resilience. Potential cost increases are a challenge for businesses, particularly those less shielded by price fluctuations, where there are impacts to competitiveness. However, concerns around affordability cannot preclude investments in the supply and transmission infrastructure needed to facilitate economic growth and ensure ratepayers can keep the lights on. Rather, costs should be managed through the planning process.

- Long-term planning horizons can help reduce the risks for investors (and therefore the costs) of new electricity infrastructure. Further, taking a proactive and regionally integrated portfolio approach to energy planning – as opposed to a more reactive, piecemeal approach – allows stakeholders to find efficiencies and mitigate the supply chain challenges, risks, and costs of new projects. The federal government's proposed carbon contracts for difference will remove additional risk associated with changes in climate pricing to help attract competitive, low-cost capital. Similarly, streamlining regulatory approvals as discussed above can help reduce project delays, risks, and costs.

- As part of its long-term energy planning, Ontario should account for distribution infrastructure needs, in addition to generation and transmission needs. Notably, the new infrastructure costs outlined in the Pathways scenario of the IESO's study (in the range of $375 billion to $400 billion) do not include investments required in the distribution system, as the IESO's mandate is focused on bulk system needs. However, distribution infrastructure needs must be quantified to ensure stakeholders can appropriately evaluate the impact of local distribution companies' investments in non-wires alternatives, which can defer or even avoid costly capital infrastructure investments in new generation and transmission capacity.

- Pursuing a diversified approach to energy supply will also help manage costs. Continued research is needed into a range of cost-effective pathways, including both electric and low-carbon fuel sources. Hybrid heating is a reliable and resilient technology that can help reduce demand for electricity during peak periods, therefore reducing the need for incremental investments in new supply and transmission.

- Meanwhile, Ontario should continue increasing the overall efficiency of our electricity system. This includes ongoing efforts by the OEB to support participation of distributed energy resources and other non-wires alternatives, and the IESO's modernization of wholesale electricity markets through its Market Renewal Program.

- Energy efficiency programs and policies (discussed below) will also play a role in reducing consumption and system costs.

- For clean energy infrastructure projects, Ontario should establish cost recovery mechanisms around the preliminary siting of resources:
    - Take a rate-based approach to avoid excessive burdens on the tax base.

- Amend contracts where appropriate to enable cost recovery over a specified period of time (e.g., similar to O.Reg. 53/05 for OPG's Darlington small modular reactor project).

- In parallel, the government should continue to review electricity rate structures to ensure costs are managed and distributed in a balanced way as the electricity system evolves. Specifically, rate structures should aim to:
  - Provide optionality to ratepayers in line with their consumption patterns.
  - Distribute demand on the grid more efficiently. For example, Ontario's recent move to establish an Ultra-Low Overnight price plan will help shift some demand towards off-peak hours.
  - Protect ratepayers most impacted by cost increases with targeted programs, such as the Class B Electricity Rate Pilot for small and medium-sized enterprises, and existing industrial rate programs for trade-exposed industries (i.e., the Industrial Conservation Initiative and Northern Energy Advantage Program).

- On the residential side, where rates are heavily subsidized by the tax base, government should consider a means-based approach that targets a larger share of subsidies towards lower- and middle-income households. As overall costs increase, this will avoid excessive subsidization of energy costs in higher-income households.

- Finally, government and businesses (along with associations like the OCC) should work to ensure consumers are adequately informed about the sources behind rising energy costs and the need for continued investments in critical infrastructure. This will ensure public debate on the matter is well-informed and productive.

Low-Carbon Fuels: Do you have any comments or concerns regarding the development and adoption of hydrogen or other low-carbon fuels for use in electricity generation?

- Low-carbon fuels are a critical opportunity for Ontario. From a climate perspective they will be necessary to decarbonize hard-to-abate sectors, like cement and steel. There is also significant economic opportunity for Ontario to develop, commercialize, demonstrate, and deploy these technologies as demand grows both domestically and internationally for cleaner energy.

- Ontario businesses are already at the forefront of low-carbon fuel innovation. For example:
  - Enbridge is blending hydrogen into the existing natural gas network in Markham.
  - Atura Power is implementing a low-carbon hydrogen program to assist heavy emitting sectors decarbonize.
  - Waste Connections is converting methane captured from its landfills into renewable natural gas (RNG) and using that fuel to power its fleets.
  - Bruce Power is launching a feasibility study to explore opportunities to leverage excess energy from its site for hydrogen production.

- Ontario should continue to pursue a multi-pronged approach to encourage private sector investments in low-carbon fuel technologies. The right mix of policies can minimize short-term costs while maximizing the longer-term economic returns to taxpayers. For example, the provincial government's move to reduce electricity rates for hydrogen producers will help improve the commercial viability of hydrogen energy in Ontario, sending a clear market signal of government's commitment to support wide-scale adoption of hydrogen solutions in the near future.

- We encourage the Government of Ontario to:
    - Define clear medium- and long-term planning targets for hydrogen supply, as seen in Europe, and RNG blending.
    - Allow utilities to recover costs of low-carbon fuel infrastructure projects through the rate base.
    - Reconsider the proposed ban on organic waste in landfills or exempt landfills that generate RNG.
    - Develop a zero-emissions fleet strategy to support municipalities and businesses with transitioning their large fleets to electric, RNG, hydrogen, and hybrid vehicle technologies.
    - Explore additional policies to support adoption of low-carbon fuel technologies, such as renewable gas mandates.
    - Work with the federal government to streamline permitting and approvals for innovative low-carbon fuel infrastructure projects.
    - Continue to develop a competitive framework for carbon capture and storage.
    - Ensure the OEB is proactively developing a competitive regulatory framework for hydrogen supply, infrastructure, and storage in a timely manner, using best practices from other jurisdictions.

Energy Efficiency: How could energy efficiency programs be enhanced to help meet electricity system needs?

- Energy efficiency programs will be increasingly important as Ontario looks to address its supply shortfalls and climate targets. Such programs can help manage resources on the grid, minimize the need for investments in new supply, mitigate the impacts of climate change, and lower costs at the ratepayer level. From an economic perspective, every dollar invested in energy efficiency programs leads to an estimated seven dollars in GDP growth.

- Government should continue to support energy efficiency programs and coordinate provincial offerings with any federal and municipal programs to avoid overlap. Natural gas and electricity conservation programs should be integrated with one another, to streamline them for customers and generate greater efficiencies. Importantly, conservation and demand management should also be integrated into long-term energy planning forecasts and frameworks.

- Further, conservation and demand management (CDM) programs should be a long-term component of Ontario's energy system, without the shorter time horizons that often characterized previous CDM frameworks, which stunted deeper and more meaningful retrofits. The model should be led by

local distribution companies, leveraging their longstanding relationships with – and detailed understanding of – their customers of all types (residential, commercial, industrial). CDM programs should also be streamlined and cost-effective, with minimal administrative burdens, to maximize the availability of programs to electricity customers provincewide.

- Building retrofit programs are a prime opportunity for innovation. Ontario should consider working with the federal government on a widescale approach to retrofits – such as the 'energiesprong' model used in the Netherlands. Rather than tackling retrofits as distinct projects, this approach leverages economies of scale by coordinating supply chains, using mass-produced assemblies and mechanical pods, and offering long-term financing and loan guarantees to property owners.
- In parallel, it is important to continue incrementally evolving the energy efficiency of both buildings and consumer electronics through codes and standards. Ontario should continue working with the federal government to establish a national, harmonized approach that aligns with similar policies in the United States and European Union. The Province should expeditiously implement new building codes established by the Canadian Board for Harmonized Construction Codes.

Hydroelectricity: What are your thoughts on the potential for development of new hydroelectric generation in Ontario by private-, Indigenous- and government-owned developers? Do you support investing in large scale hydroelectric assets that may operate for over a hundred years?

- Large-scale hydro facilities operate over several decades, providing a clean and reliable source of power while facilitating economic growth, particularly in Northern Ontario, where there is an estimated 3,000 – 4,000 MW of untapped hydroelectric potential.
- As an example, OPG's proposed Little Jackfish River project would bring up to 78 megawatts of hydroelectric power and new transmission lines to Northwestern Ontario. This project would support the region's long-term economic development, advance economic reconciliation, and help unlock the competitiveness of Ontario's critical mineral supply chains.
- As with all resources in our electricity system, it is important for Ontario to balance overall costs and impacts on ratepayers. Construction of large-scale hydro facilities is capital intensive and should be considered as a long-term investment, while the province continues to foster price competition in its electricity markets to balance affordability, reliability, and sustainability. We recommend a market-based procurement specific to hydroelectric generation be developed to help drive down costs based on competition.
- For longer-term hydro projects, Ontario should begin taking steps today to allow for co-planning with Indigenous communities and the requisite environmental assessments.
- Meanwhile, Ontario should also explore opportunities to unlock hydro potential from existing assets – including re-contracting, refurbishments, and pumped storage.

Transmission: What steps should be taken to ensure that transmission corridors can be preserved and lines can be built as quickly and cost effectively as possible?

- Transmission infrastructure is a prerequisite for load growth, and therefore economic growth, in Ontario. Siting new lines is a significant undertaking that will require advanced planning and cross-sectoral collaboration and engagement across both Indigenous and non-Indigenous stakeholders.
- A proactive approach is needed to ensure timely and adequate investments in new transmission lines. Allowing transmission companies to bulk their developments can alleviate pressure, particularly in regions experiencing rapid load growth.
- Coordination between entities responsible for transmission, distribution, and generation infrastructure is particularly important under current planning structures, which are fragmented. Government can facilitate alignment and coordination of the various stakeholders along a shared set of priorities to meet future demand expeditiously and cost-effectively.
- Further, environmental assessments and approvals processes will need to be streamlined, while maintaining the integrity of the process. In Northern Ontario, mining developments will be delayed if steps are not taken to accelerate connections to the grid.

Other: Do you have any additional feedback on the IESO's "no-regret" recommendations?

- A successful energy transition and continued operation of Ontario's energy system will depend on the readiness of our labour force. To that end, the Government of Ontario should work with post-secondary institutions and industry to ensure workers are equipped with the right skillsets, by:
    - Developing a net-zero career roadmap to identify and bridge labour market gaps across different job functions, sectors, and regions.
    - Building partnerships to design reskilling and upskilling programs that fill those gaps.
    - Improving training and educational pathways for Indigenous people in the green economy, particularly in environmental science, technology, engineering, and skilled trades.

In closing, we would like to thank you and your Electrification and Energy Transition Panel for the opportunity to comment on these important questions. The OCC and our members look forward to working with you to ensure Ontario continues to benefit from a clean, reliable, and affordability energy system for generations to come.

Sincerely,

Rocco Rossi
President and CEO
Ontario Chamber of Commerce