## Received by infrastructure and Environment Committee on October 25, 2023



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## Enbridge Gas Inc Response to City of Toronto's comments on draft Clean Electricity Regulations

Re: ITEM IE7.6

Enbridge Gas Inc (Enbridge) wishes to respond to the City of Toronto's (COT) comments on Federal draft Clean Electricity Regulations. Enbridge shares the federal government's goal of achieving net zero by 2050, and sees the Clean Electricity Regulation (CER) as an important policy in reaching that objective. The decarbonization of Canada's electrical grid is a significant challenge and must be carried out in a manner that preserves reliability and affordability for Canadians. Enbridge is concerned that the recommendations provided by the COT on the draft CER may lead to unintended consequences that could significantly disrupt the proper functioning of Ontario's electrical grid and quality of life for Ontarians. Please find Enbridge's specific responses to the COT's comments on the CER below.

## 1) The Importance of Gas-fired Power Generation in Ontario

Enbridge recommends the COT clarify its request for the Government of Canada to prohibit the expansion of "unabated" gas-fired generation capacity at the Portland's Energy Center, so as not to put at risk the reliability of the electricity system in Toronto for current needs, as wells as potentially preventing the future availability of this important electricity infrastructure and decarbonization pathway. As noted in recent reports by the IESO and the Ontario Government<sup>1</sup>, and as evidenced by recent procurements and Ministerial Directives<sup>2</sup>, gas-fired power "currently plays a pivotal role in supporting grid reliability" and that completely phasing out gas-fired generation by 2030 would lead to blackouts and increase residential electricity bills by 60 per cent<sup>3</sup>. IESO's Pathways to Decarbonization report concludes that Ontario will continue to require 8,000 MW of gas-fired generation on the system in 2035, particularly in the GTA, to ensure reliability of the electricity system that the COT and its residents and businesses depend on. To further illustrate the scope of the challenge represented by replacing the 550 MW of dispatchable power delivered by the Portlands Energy Center alone, Enbridge assumes that approximately 110,000 solar<sup>4</sup> and battery storage deployments would need to be installed in Toronto homes at a cost of approximately \$2.9B. As a comparison, 30,000 microFIT<sup>5</sup> contracts (10kW

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<sup>&</sup>lt;sup>1</sup> Government of Ontario. 2023. Powering Ontario's Growth. Powering Ontario's Growth | ontario.ca

<sup>&</sup>lt;sup>2</sup> Executive Council of Ontario. 2023. Order in Council.

<sup>&</sup>lt;sup>3</sup> Independent Electricity System Operator. 2023. Decarbonization and Ontario's Electricity Sector. <a href="https://www.ieso.ca/-/media/Files/IESO/Document-Library/gas-phase-out/Decarbonization-and-Ontarios-Electricity-System.ashx">https://www.ieso.ca/-/media/Files/IESO/Document-Library/gas-phase-out/Decarbonization-and-Ontarios-Electricity-System.ashx</a>

<sup>&</sup>lt;sup>4</sup> Assuming 5kW solar and a 13.5kWh battery storage system per residential installation, with installed cost of

<sup>\$12,000</sup> for solar and \$15,000 for battery storage.

<sup>&</sup>lt;sup>5</sup> Independent Electricity System Operators. Retrieved on October 2025. microFIT Program. microFIT Overview (ieso.ca)



or less) were executed across Ontario over an eight-year period that offered 20-year guaranteed pricing contracts of up to 31.1 cents/kWh<sup>6</sup> for rooftop solar installations. Enbridge suggests that considerable incentives will be required to encourage the development of rooftop solar and battery storage installations by Toronto property owners, such that the reliance on the Portland Energy Center or other gas-fired power generation in Ontario is no longer required.

EGI recognizes COT's desire to limit fossil fuel derived power and, therefore, recommends COT acknowledge the role that RNG and hydrogen can play in allowing existing gas-fired power generating infrastructure to meet decarbonization goals while preserving operability and resiliency within Ontario's electricity system. It is important that COTs recommendation to limit fossil-fuel derived power, does not prevent existing or new gas-fired power generating facilities from being deployed with renewable and low carbon gases such as RNG and hydrogen. The introduction of hydrogen into gas-fired generating facilities not only lowers carbon emissions, but can serve to increase electrical grid balancing capabilities. As an example, Atura Power's Niagara Hydrogen Center (2025 in-service date) will offer grid-balancing capabilities by utilizing hydro-electricity produced from the Sir Adam Beck II Generating Station to produce hydrogen, which will then be transported to its Halton Hills Generating Station that services peak power demands<sup>7</sup>.

Enbridge Gas readily supports the COT GHG Reduction Strategy through Blending RNG (IE14.78) and is proud of the role it plays in helping the COT to realize its strategy. While COT has a strategy to utilize the RNG it produces for its vehicles and building heat, it's possible that increasing energy efficiency and electrification of COT vehicles and facilities may result in the COT having a surplus of RNG in the future that could be used to support power generating facilities in meeting their CER compliance requirements.

Enbridge agrees that storage of captured carbon must have a low risk of reversal or negative social and environmental consequences. Enbridge would like to further highlight that gas-fired power generators equipped with carbon capture systems utilizing RNG represent one of the few net-negative methods of power producing technologies that offers a pathway to achieving 2050 economy-wide net-zero objectives.

## 2) The CER Needs to Incentivize Early Action and Development of Non-emitting Resources

Enbridge agrees with the COT that the federal government should encourage the expansion of renewable generation and storage. In its current form, the CER provides no recognition or direct incentives for facilities to invest in non-emitting technologies or undertake action prior to 2035. Enbridge recommends that the draft CER be modified to expand the current compliance mechanisms, that are currently limited to the use of biomass, (e.g., RNG), hydrogen, carbon capture and storage, or reduced operations for regulated facilities, to rewards and incent taking voluntary action prior to 2035 and recognize investments in non-emitting resources. Furthermore, the CER provides no benefit for facilities that aim to perform below the 30 tCO2/GWh performance standard or at net negative levels

bibid. 2017. Price Schedule (effective January 1, 2017). https://www.ieso.ca/-/media/Files/IESO/Document-Library/microFiT/version-4/FiT-microFiT-Price-Schedule-2017-01-01.ashx

Atura Power. Retrieved on October 2023. Niagara Hydrogen Centre - Atura Power

<sup>&</sup>lt;sup>a</sup> City of Toronto. Retrieved on October 23, 2023. <u>Turning Waste into Renewable Natural Gas – City of Toronto</u>





(e.g., biomass plus carbon capture). To achieve this goal, EGI recommends the COT revise its following statement with the underlined text provided "We request the federal government to encourage the Government of Ontario and its agencies to increase renewable generation and storage, in order to provide non-emitting, reliable electricity generation for the future, and to achieve the federal government's 2035 objective of a net-zero electricity sector. The CER can achieve this goal by introducing additional compliance mechanisms that recognize and incentivize investments in non-emitting generation technologies and/or where facilities take voluntary action prior to 2035 and/or where they operate below the performance standard."

Enbridge would be happy to discuss our recommendations with the City of Toronto.

Thank you,

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