Feedback Form

Pathways to Decarbonization – February 24, 2022

Feedback Provided by:

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Date: March 16, 2022

Following the February 24 engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed during the webinar. The webinar presentation and recording can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by **March 16**. Please attach research studies or other materials for consideration by the IESO to support your submission.

If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Policy

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	No. The assumptions about carbon tax rates are incorrect. The Federal Government is committed to raising its carbon tax to $170/tonne by 2030. The IESO assumes that gas fired generation will only be subject to $50/tonne. [Ref 1] Secondly, the Federal Government has committed to a net zero electricity system for Canada by 2035. With the most recent IPCC Report [Ref 2] warning that maintaining a livable world will require more aggressive investment in green solutions, IESO should be designing their policies by requiring a green grid that meets or exceeds the Federal commitment.

Topic	Feedback
Are there other considerations for the IESO?	1] Thirty-two Ontario municipalities, representing almost 60% of the province's population, have passed resolutions calling on the Government of Ontario to phase-out gas power. They are building aggressive climate action plans that assume green electricity on the timeline established by the Federal Government. Without a green electricity grid, many of these strategies and programs will fail and their failure will undermine our national response to the climate crisis. [Ref 3] 2] The IESO must revise its policies related to local energy generation and distribution to enable solar and wind electric generation, and waste heat capture, to be managed on a community basis to reduce reliance on large scale generation. [Ref 4, Ref 5]

Demand

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	Assumptions about storage available to support peak electricity demand need to be remodeled. The e-vehicle batteries represent storage and peak load power source and should be modeled as such and policies to incentivize bi-directional chargers should be implemented immediately. [Ref 1]

Topic	Feedback
Are there other considerations for the IESO?	The potential for community energy solutions that capture and distribute energy locally, reducing peak loads and creating storage environments, appear to be missing from your models. District energy solutions are operating successfully in a limited way (Enwave is the early success story) but opportunities to expand significantly in higher density communities need to be investigated and introduced into outyear modeling of demand and supply. The European experience is well documented and provides an excellent starting point for this work.[Ref 4]

Resources

Topic	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	New nuclear generation in the GTA is not cost effective and represents a significant risk given construction cost/timing uncertainty and lack of waste storage capacity. It may be appropriate to keep Ontario's existing gas power capacity on standby only (not in active use) to serve as an emergency back up supply until 2040. To address the .03% capacity gap, wind and solar, with purchase of storage from Quebec and electricity from existing hydro generation in Quebec or Manitoba, should be implemented. [Ref 1]

Topic	Feedback
Are there additional data sources that we should consider	Look into district energy solutions in Europe and re-calibrate your pathway. [Ref 4, Ref 5]
Are there other considerations for the IESO?	Based on cost and safety concerns, new nuclear construction should not be in the mix. [Ref 1]

General Comments/Feedback[1]

ClimateFast is a volunteer organization dedicated to advocacy for urgent climate action. We are informed by the science, and the science is clear: From the reports of the IPCC (Ref 2), the analyses of the City of Toronto (Ref 3), and the work of experts focused on energy solutions for this province (Ref 1 and Ref 4) there is no doubt that the electricity grid in Ontario MUST phase out gas power by 2030 if this province is to achieve the GHG reductions necessary to support a liveable future.

The current plan to increase the use of gas for electricity generation by 375% by 2030 and by more than 600% by 2040 in order to replace aging nuclear reactors and meet anticipated demand for electricity, is not compatible with the need to phase out fossil fuel emissions and safeguard a livable planet at all! This will condemn both the province and the country to failure - we will not achieve even the minimum net-zero targets required for Canada to meet its global commitment to greenhouse gas reductions.

32 Municipalities, representing over 60% of the population of this province, are relying on a green grid to deliver reductions in GHG emissions in buildings, transportation, and industry. The IESO must lead the electricity providers across this province in a transition to a green grid, by ensuring that gas fired generators are phased out immediately and replaced by green energy sources, with appropriate agreements for electricity and storage with Quebec and Manitoba. The IESO must encourage and support innovative solutions for energy capture and distribution at a community level that reduce reliance on centralized power generation and increase resiliency.

References:

[Ref 1)] Ontario Clean Air Alliance Zero Emissions Report Updated Feb 25, 2022 accessed March 15, 2022 and found at https://www.cleanairalliance.org/wp-content/uploads/2022/03/Zero-Emissions-Report-2022-feb-25-v_02.pdf

[Ref 2] IPCC Sixth Assessment Report, accessed March 15, 2022 and found at https://www.ipcc.ch/report/ar6/wg2/

[Ref 3] City of Toronto Transform to Net Zero Strategy is a case in point. Accessed March 15, 2022 and found at https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-173758.pdf

[Ref 4] "Towards a decarbonised heating and cooling sector in Europe" accessed March 15, 2022 at https://vbn.aau.dk/ws/portalfiles/portal/316535596/Towards_a_decarbonised_H_C_sector_in_EU_Final_Report.pdf

[Ref 5] Jamie Stephenson, Managing Director of Torchlightbioresources has excellent analyses of the applicability of the European experience to the Canadian context. Access more at https://www.torchlightbioresources.com/.

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