Feedback Form

Pathways to Decarbonization – February 24, 2022

Feedback Provided by:

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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 <u>engagement web page</u>.

Please submit feedback to <u>engagement@ieso.ca</u> 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

Торіс	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	No – way too narrow in scope, since gas must be excluded from the heating market, there is a vacuum that the IESO should fill to an extent. Heat should be considered along with electricity; e.g., flexible biomass fired combined heat and power plants with Carbon Capture and Sequestration could take the place of gas-fired plants – see attached presentation from Dr. Jamie Stephen on DE- the missing infrastructure. If you don't do this you are not truly looking for the best energy plan for Ontario.

Торіс	Feedback
Are there other considerations for the IESO?	The Ontario Society of Professional Engineers is pushing for electricity retail price reform that would make what would otherwise be surplus power more valuable. This would improve the economics of over-building intermittent resources like wind to displace gas. You should assume this rate reform push will be successful.

Demand

Торіс	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	No – emissions must be slashed 60% by 2030.

Торіс	Feedback
Are there other considerations for the IESO?	If all buildings were fitted with air source heat pumps the resulting peak demand would be like nothing the grid has ever seen, or wants to see because building capacity to meet such high peaks, persistent in duration far beyond the capabilities of batteries, would not be a good investment in \$ or materials, with all the embedded carbon. See attached report by ICF. It is not for nothing that the gas distribution system in Ontario has two and a half times the capacity in Megawatts as the electricity system. You need to look at the hourly temperatures from Environment Canada and map the resulting hourly heat demand equating that to the reported annual consumption of oil and gas by the residential and commercial sectors.

Resources

Торіс	Feedback
Are the assumptions indicated reasonable and comprehensive in terms of scale and timing?	Flexible biomass fired combined heat and power is not considered.

Торіс	Feedback
Are there additional data sources that we should consider	The gas plant operating costs should include the carbon prices on all emissions, not just above the too lenient standard. The reason is that every extra tonne of emissions the gas plants produce must be reduced by another actor in another sector and the carbon price is the approximate cost of that. So, you are failing in your fiduciary duties (and may expect legal challenges on this) to your shareholders, the people of Ontario by not minimizing their total costs of electricity + carbon taxes.

Торіс	Feedback
Are there other considerations for the IESO?	Another way of looking at the previous point is that when gas is on the margin, the net cost of any decarbonization measure that uses electricity is higher because the net reduction in tonnes is less, divided by the cost comes to a higher net cost per tonne. You are not saving Ontarian's money by not charging gas plants the full carbon taxes. We would get the money back in Climate Incentive Payments anyway. All you are doing is protecting outdated incumbent technology from competition from cleaner sources. It's the same with Quebec power – you are just protecting OPG and the other fossil fuel burning incumbents from competition. You should be promoting competition and innovation, not stifling it

General Comments/Feedback

The IESO needs to realize that climate change is real, it's us, it's bad, it has to be addressed now (not by 2050), it can easily be addressed in the electricity sector, which should be the first sector to reach zero emissions, as many other decarbonization measures are based on electrification. The IESO has an important role in addressing it. It should take a professional approach, according to science and not cow-tow to populist politicians nor denialists, even if they happen to be your chairman.