

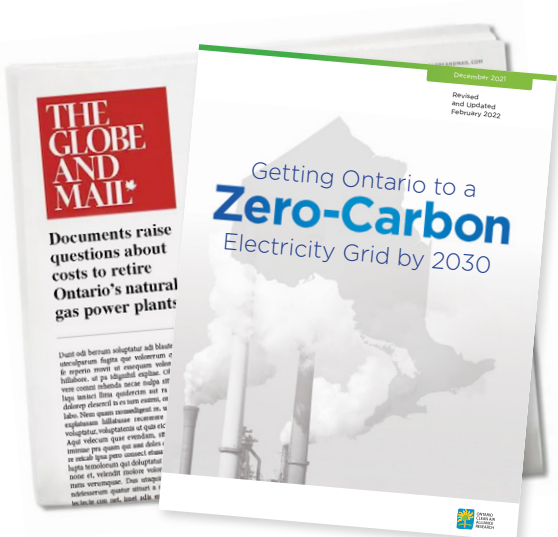
# More IESO Trickery

## About Phasing-Out Gas Power



### Introduction

In October 2021, Ontario's Independent Electricity System Operator (IESO) released a report, **Decarbonization and Ontario's Electricity System: Assessing the impacts of phasing out natural gas generation by 2030**, that claimed that phasing-out gas-fired power by 2030 would raise residential electricity rates by 60% and cause blackouts.



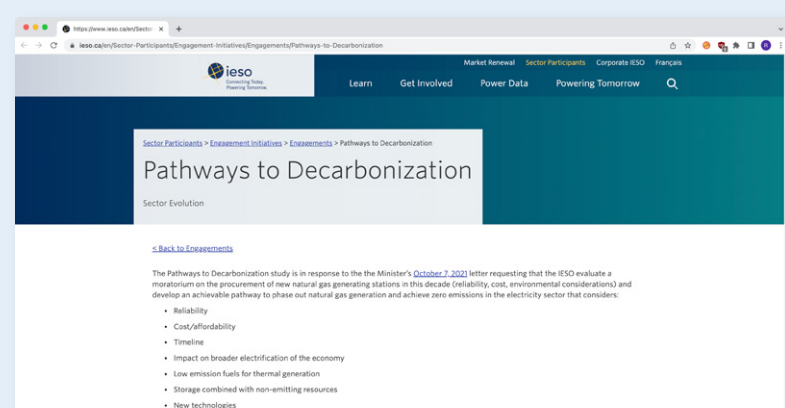
In December 2021, we released a report, **Getting Ontario to a Zero-Carbon Electricity Grid by 2030**, that showed that the IESO's claims were false and irresponsible.

In addition, on April 15, 2022, the **Globe and Mail** reported that the IESO had deliberately suppressed its own analysis that showed that a gas power phase-out by 2030 would have a minimal impact on electricity rates.

Specifically, **according to the IESO's suppressed analysis**, subjecting 100% of the gas-fired power plants' greenhouse gas (GHG) pollution to the federal carbon tax would reduce gas-fired generation by 75% by 2030 and raise electricity costs by only 3%. This would occur because the carbon price signal would lead to fewer gas power exports to the U.S. and more imports of low-cost waterpower from Quebec.

Furthermore, the IESO's suppressed analysis found that by investing in energy efficiency, demand management, energy storage and wind energy, we could reduce our electricity costs by 8% and achieve additional reductions in gas-fired electricity generation.

## The IESO's forthcoming Pathways to Decarbonization report



In October 2021, Ontario's Minister of Energy sent the IESO back to the drawing board to develop a new report on how to phase-out gas power. The new phase-out report is due by November 2022.

**On July 19, 2022, the IESO released its assumptions or input values for its new phase-out report.**

The IESO's proposed assumptions reveal that it is planning to once again issue a

fearmongering report that will ignore many of our lowest-cost options to move to a zero-carbon electricity grid by 2030.

### The IESO is once again adopting a number of biased assumptions, including:

- 1 That only 5% of the gas plants' GHG pollution will be subject to the federal carbon tax<sup>1</sup> in 2030 despite the fact that the IESO's suppressed analysis showed that subjecting 100% of the gas plants' pollution to the carbon tax would reduce their pollution by 75% and raise costs by only 3%.
- 2 No analysis of the benefits and costs of banning gas-fired electricity exports to the U.S.
- 3 No analysis of the benefits and costs of using our existing transmission links with Quebec to maximize our spot market imports of low-cost Quebec waterpower in 2030.
- 4 An assumption that Ontario should only pursue energy efficiency investments that can keep our lights on at a cost of less than 3.9 cents per kWh<sup>2</sup> despite the fact that we are currently paying **Ontario Power Generation 10.5 cents per kWh for its nuclear electricity**. This does not make sense. If we want to decarbonize our electricity system at the lowest possible cost, we must pursue all energy efficiency opportunities that can keep our lights on at less than or equal to the cost of electricity supply.
- 5 No analysis of the costs and benefits of using Hydro Quebec's reservoirs as an energy storage option despite the fact that **according to a MIT study** these reservoirs are the lowest-cost storage option for wind and solar energy. **Wind and solar are now Ontario's lowest-cost sources of new electricity supply**, but to make the most of these supply options, they must be combined with electricity storage investments.
- 6 The IESO has still not revealed its input assumptions with respect to the cost and potential of EV bi-directional charging, which can enable EV batteries to store surplus wind and solar energy and provide this power back to the grid during peak demand hours to help phase-out gas power.<sup>3</sup> This is a serious omission since by **2030 the capacity of our EV batteries will be more than double the capacity of our gas-fired power plants**.
- 7 No transparency on assumptions with respect to the price of Quebec waterpower. This refusal to reveal assumptions is very problematic given that the IESO's 2021 phase-out report assumed that the price of Quebec waterpower would be 8.6 cents per kWh (2021\$)<sup>4</sup> despite the fact that Hydro Quebec's average export price in 2021 was only 5.3 cents per kWh.<sup>5</sup>
- 8 Assumes that new transmission links (interties) between Ontario and Quebec will be arbitrarily capped at 2,000 megawatts (MW) between now and 2050 despite the fact that **previous IESO reports** have identified the potential to upgrade our import capability by 7,500 MW using existing Hydro One transmission corridors.
- 9 Assumes that it would take 10 years to build a new 2,000 MW intertie with Quebec despite the fact that the most recent new Ontario-Quebec intertie was built in 2 years and 3 months. That is, Hydro Quebec began construction on the 1,250 MW Outaouais intertie in June 2007 and it went into service in September 2009.<sup>6</sup>
- 10 Ignoring the potential to move Ontario to a virtually zero-carbon electricity grid by 2030 with zero risk of blackouts by putting the province's existing gas-fired power plants on standby reserve between 2030 and 2040 so that they can provide emergency back-up power to the provincial electricity grid if Ontario temporarily has insufficient carbon-free electricity resources to meet its needs due to an extreme event. This failure is highly perplexing given that the Government of Canada's **Proposed Frame for the Clean Electricity Regulations** permits unabated gas-fired power plants to be used during emergency circumstances.

## Conclusions and Recommendation

**Thirty-four municipalities** representing almost 60% of Ontario's population have passed resolutions requesting the Government of Ontario phase-out gas power.

Nevertheless, within the next few months, the IESO is planning to issue a misleading Pathways to Decarbonization report that will grossly exaggerate the cost of moving Ontario to a zero-carbon electricity grid in an attempt to justify its plan to dramatically ramp up gas-fired electricity generation. This is not what Ontario needs. We need a true Least-Cost Pathways to Decarbonization report.

### As we outlined in our **Getting Ontario to a Zero-Carbon Electricity Grid by 2030** report, the key elements of a least-cost pathway to decarbonization are:

- 1 Banning gas-fired electricity exports to the U.S.
- 2 Doubling our spot market purchases of Quebec waterpower using our existing transmission links with Quebec.
- 3 Purchasing all energy efficiency savings and solar and wind power that can keep our lights on at less than today's price of nuclear electricity (**10.5 cents per kWh**).
- 4 Expanding our transmission links with Quebec by up to 7,500 MW to increase our ability to purchase Quebec waterpower and to use Hydro Quebec's reservoirs to store our surplus wind and solar energy.
- 5 Installing bidirectional chargers for our cars, school buses and fleet vehicles so that they can play a major role in helping Ontario achieve a gas power phase-out by 2030.
- 6 To avoid any risk of blackouts as we transition to a zero-carbon electricity system, the Government of Ontario can direct Ontario Power Generation to put its five large gas-fired power plants on standby reserve from 2030 to 2040 so that they can provide emergency back-up power to our electricity grid if we temporarily have insufficient carbon-free electricity to meet our needs due to extreme events.

**Ontario's Minister of Energy, Todd Smith, should direct the IESO to produce a Least-Cost Pathways to Decarbonization report.** We need real solutions that will protect our planet, our economy and electricity consumers, not more fearmongering.

#### Endnotes

<sup>1</sup>The IESO is assuming that only gas plant emissions in excess of 370 tCO<sub>2</sub>e/GWh will be subject to the federal carbon tax in 2030. According to the IESO's 2021 *Annual Planning Outlook*, the average emission rate of Ontario's gas plants in 2030 will be 390 tCO<sub>2</sub>e/GWh. <https://www.ieso.ca/en/Sector-Participants/Planning-and-Forecasting/Annual-Planning-Outlook>

<sup>2</sup>According to the IESO it will only consider the energy efficiency opportunities identified in the 2019 Navigant Consulting report prepared for the IESO and the Ontario Energy Board. This report only identified energy efficiency opportunities with a cost of 3.9 cents per kWh or less. Navigant Consulting Ltd., *2019 Integrated Ontario Electricity and Natural Gas Achievable Potential Study*, (September 13, 2019), page v.

<sup>3</sup>According to the IESO, incremental distributed energy resources can potentially exist up to the levels identified in the IESO's 2022 *Distributed Energy Resource Achievable Potential Study*. The IESO has still not publicly release this report.

<sup>4</sup>Email from Salvatore Providenza, IESO to David Devereaux, IESO (March 4, 2022).

<sup>5</sup>Hydro Quebec, *Annual Report 2021*, page 100.

<sup>6</sup>Email from Gary Sutherland, Director, Strategic Affairs and Stakeholder Relations, Hydro Quebec to Jack Gibbons, Ontario Clean Air Alliance (August 8, 2022).

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