

## **IESO Engagement**

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**From:** Jeffrey Levitt  
**Sent:** May 28, 2021 4:18 PM  
**To:** IESO Engagement  
**Subject:** Feedback - Gas Phase-Out Impact Assessment

I am providing the following comments and questions in response to the engagement process to inform future discussion about the implications of a phase out of natural gas generation in Ontario through the development of a white paper.

### **Executive Summary**

#### **TOPIC:**

- Are there additional considerations the IESO has not identified in defining the scope of the assessment to examine the reliability, operability, timing, cost and wholesale market implications of reduced emissions on the electricity system?

#### **SUMMARY OF ADDITIONAL CONSIDERATIONS**

- The proposed Gas Phase Out Impact Assessment is consistent with the *Electricity Act, 1998*.
- The fact that phasing out gas electricity generation in Ontario will present challenges is not a reason for failing to undertake the process. Phasing out coal generation also presented challenges, but these were successfully overcome.
- In considering "costs" of electricity generation, consideration must not be limited to operational costs, but must also include costs relating to public health and the environment (particularly costs related to climate change).
- In view of the present climate emergency, and IESO's objects under the *Electricity Act, 1998*, a priority consideration for IESO must be the reduction of GHG emissions from the generation of electricity in Ontario.
- IESO must include in its analysis the effects of current carbon pricing on gas generation of electricity, as well as the effects of potential future changes to carbon pricing.

### **Discussion**

#### **COMMENTS**

##### **1. Gas Phase Out Impact Assessment is consistent with the *Electricity Act, 1998***

The current Gas Phase Out Impact Assessment is absolutely necessary, and is entirely consistent with:

- **the objects of the IESO** under s. 6 of the *Electricity Act, 1998*, which provides as follows:

6 (1) The objects of the IESO are,

...  
 (m) to engage in activities to facilitate the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources;

- **long term energy plans issued by the Minister** of Energy, Northern Development and Mines under s. 25.29 of the *Electricity Act, 1998*, which provides as follows

25.29 (2) ... a long-term energy plan may include goals and objectives respecting,

...  
 (d) the use of cleaner energy sources and innovative and emerging technologies;

(e) air emissions from the energy sector, taking into account any projections respecting the emission of greenhouse gases developed with the assistance of the IESO;

## **2. The fact that phasing out gas electricity generation in Ontario will present challenges is not a reason for failing to undertake the process**

IESO's letter of March 9, 2021 to Toronto City Council fulsomely sets out the potential issues that might arise in phasing out gas generation of electricity, and concludes with an entreaty "... to not underestimate the impact that taking gas out of our supply mix by 2030 would have on the electricity system".

The letter also provides examples of negative consequences in other jurisdictions that allegedly resulted from a shift away from fossil fuel electricity generation (one of which, the experience in Texas, arguably had nothing to do with reliance on renewable energy sources).

Notably absent from the letter were successes achieved in other jurisdictions.

Clearly, phasing out gas generation will present challenges, and there may be a continuing role for gas generation (for example, to provide reserve power).

However, other jurisdictions have had success in reducing reliance on fossil fuels for electricity generation, which demonstrates that where there is a will, there is a way.

We need only look to Ontario's successful phase out of coal generation of electricity, which also presented many challenges.

## **QUESTIONS**

### **1. The issue of "Lowest Cost" in IESO's deliberations**

The IESO draft Engagement Plan states as follows:

The IESO is also responsible for planning for future needs, ensuring that tomorrow's system can be operated reliably at lowest cost to Ontarians. (emphasis added)

#### ***Additional Consideration 1:***

The *Electricity Act, 1998* does not appear to require that the electrical system must be operated at the "lowest cost".

### **Additional Consideration 2:**

IESO must not consider "cost" to be limited to operational costs, but rather must also consider public health and environmental costs associated with electricity generation.

- Given that IESO's consideration of electricity supply is a public policy driven process, the consideration of "costs" should be expanded to include the wider effects of policy choices regarding electricity generation, including
  - future health care costs in Ontario from illnesses caused by burning fossil fuels, and
  - future adaptation costs in Ontario to respond to the effects of climate change.
- The decision to phase out coal provides an example of using a wider definition of costs (which includes public health and environmental costs), when making decisions about future electricity generation in Ontario.
  - The IESO in its letter of March 9, 2021 to Toronto City Council acknowledged that significant costs were incurred in phasing out coal generation:

It is also important to recognize the costs associated with phasing out coal. The investment in replacement supply, transmission and distribution upgrades increased system costs by 27 per cent over a 10-year period.

- The rationale for ending coal generation of electricity was to achieve reductions of GHG emissions, local and regional air pollution and mercury emissions. <https://www.ontario.ca/page/end-coal>
- The financial costs of phasing out coal generation of electricity were clearly felt to be acceptable in view of the resulting public health and environmental benefits.
- In its deliberations about phasing out gas generation of electricity, IESO should similarly use a broad definition of "costs" which takes account of public health and environmental costs.

## **2. Increase in GHG emissions from electricity generation are a permissible, and indeed essential, consideration for IESO planning**

As noted above, the objects of IESO include "engag[ing] in activities to facilitate the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including ... renewable energy sources".

The Supreme Court of Canada, in rejecting Ontario's challenge to the constitutionality of the federal *Greenhouse Gas Pollution Pricing Act*, recognized the imminent and existential threat to Canada, and to the world, posed by global warming:

Global climate change is real, and it is clear that human activities are the primary cause.

The effects of climate change have been and will be particularly severe and devastating in Canada.

All parties to this proceeding agree that climate change is an existential challenge. It is a threat of the highest order to the country, and indeed to the world.

IESO acknowledges in Figure 37 of its 2020 Annual Planning Outlook that GHG emissions from electricity generation in Ontario will increase by a magnitude of 4.4 or 5.25 times by 2040 (depending on the scenario).

The Intergovernmental Panel on Climate Change has stated that significant short term action must be taken to limit global warming to 1.5°C

... limiting global warming to 1.5°C would require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO<sub>2</sub>) would need to fall by about 45 percent from 2010 levels by 2030.

<https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

### **Additional Consideration 3:**

In view of:

- the existential threat posed by climate change,
- the need for immediate action to reduce GHG emissions, and
- IESO's objects, which include facilitating the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including renewable energy sources, the projected increase of more than 4.4 or 5.25 times (depending on the scenario) in GHG emissions from electricity generation in Ontario over the next 20 years is unacceptable.

### **Additional Consideration 4:**

If Canada is to meet its commitment to achieve net zero GHG emissions by 2050, and Ontario continues its current plans for gas generation of electricity, other sectors of Ontario's economy will be unfairly burdened by having to decrease their GHG emissions to compensate for the increase in Ontario's GHG emissions from gas generation of electricity.

## **3. Accounting for future changes to carbon pricing of gas generation of electricity**

Under the Province of Ontario's Emissions Performance Standards (EPS), gas generation of electricity is subject to very little carbon pricing.

If the federal Output Based Performance Standards (OBPS) regulation is amended in the future to increase the benchmark applied to the electricity sector from the current 370 t CO<sub>2</sub>e/GWh for existing generation facilities, a similar change would be required to Ontario's EPS in order for it to meet the stringency of the federal OBPS under the federal backstop *Greenhouse Gas Pollution Pricing Act*.

### **Additional Consideration 5:**

The IESO should consider the possibility that gas generation of electricity may in future be subject to an increased level of carbon pricing.

Thank you for the opportunity to participate in the engagement process.

Jeffrey Levitt