

Feedback Form

Gas Phase-Out Impact Assessment – May 27, 2021

Feedback Provided by:

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Date: 2021-05-27

To promote transparency, feedback submitted will be posted on the Gas Phase-Out Impact Assessment webpage unless otherwise requested by the sender.

Please provide feedback by June 17, 2021 to engagement@ieso.ca. Please use subject:

Feedback - Gas Phase-Out Impact Assessment

Questions

Topic	Feedback
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?	See my previous feedback

General Comments/Feedback

Further to my previous comments. The current practice of using natural gas for peaking power should be rendered “environmentally obsolete” by various low-cost energy storage technologies, which may currently cost slightly more than simply burning gas, maybe not after a few years of rising carbon prices, but, in any case, reasonably affordable in the context of the climate crisis, which should be regarded as akin to a state of war. For example, the following. 1) hydrogen produced off-peak by PEM electrolyzers at all of the 50 or so gas plant sites (except those soon going out of service or producing CO2 for greenhouses), may require change in policy to allow low-cost energy conversion through hydrogen for emissions reduction. 2) two examples of which I’ve come across recently, seasonal storage of otherwise surplus power from variable sources as high temperature heat in sand, either for heating, or using lower temperature cycle (e.g. ORC) peak power generation, see <https://polarnightenergy.fi/>, <https://www.rechargenews.com/energy-transition/sand-ice-and-supercritical-co2-innovative-long-duration-system-offers-cheapest-energy-storage-yet-/2-1-1011163> and https://aenewengland.org/images/downloads/AEE_ASHRAE_JointMeeting_March2013/orc_power_generation_pratt_and_whitney.pdf