

Conservation Framework Mid-term Review – Webinar #3

IESO Response to Stakeholder Feedback – September 7, 2017

The IESO held the third stakeholder meeting for the Conservation Framework Mid-term Review on September 7th, 2017 on the following topics:

Collaboration

Governance and Operations

Planning Integration

Climate Change

The IESO invited stakeholders to ask questions on the materials presented, and received questions from the following stakeholders during the webinar:

Peterborough Distribution Inc

Powerful Solutions

Quest Canada

IESO responses are in italics.

Stakeholder Engagement Q&A and Responses

Peterborough Distribution Inc

Request that the presentation and key questions be sent out following the webinar, so attendees can provide feedback and written questions.

Yes, the presentation will be circulated. Also, all materials are posted to the IESO website under active engagements. Slide 35 of today's presentation contains a link to the website.

Quest Canada

Question whether fuel switching from gas to electricity goes against the objective of CDM to reduce electricity demand.

Fuel switching does increase electricity demand, however another objective of CDM is to manage electricity usage in order to mitigate carbon emissions and adverse environmental impacts from other energy sources. One way to do this is fuel switching, i.e. switch from a source of high carbon intensity fuel to fuels with lower carbon intensities. Electricity is a source of energy with low carbon intensity for certain periods of the year.

Follow up statement that electricity may have a relatively high carbon intensity when natural gas generation facilities are the source of generation on the margin.

In this presentation, carbon intensities from different fuel sources were depicted on an average basis over the course of a year. However, the time of day, weather and other factors cause carbon intensities of electricity to change. For example, there are certain times when Ontario can export electricity and displace fuels with a high carbon intensity. These average values are blunt instruments that attempt to show that, on average, electricity is a fuel source with a relatively low carbon intensity.

Follow up statement regarding the average grid emission factor that is displayed in the presentation (32 g/kWh). Since CDM is expected to displace generation at the margin, a higher emission factor would be more relevant.

This average emission factor is an example of a blunt instrument that was described earlier. An average emission factor does not accurately capture time of day, seasons etc. However, if we are planning on optimizing between efficient electricity use and mitigating greenhouse gas emissions, the emission factor that is used must be representative of marginal factors. This factor will be updated in the final Mid-term Review report.

An error in a chart was identified, where a combined-cycle gas turbine had a higher emission factor than a single-cycle gas turbine.

The metrics have been corrected to reflect the appropriate technologies.

Request that the methodology used in the climate change report to calculate greenhouse gas metrics be shared.

The MT CO₂ eq. metrics used on slide 27 are taken from the Ontario Planning Outlook. Additional detail can be found at the following link <http://www.ieso.ca/en/sector-participants/planning-and-forecasting/ontario-planning-outlook>. The emission factors by resource used on Slide 29 represent an average g/kWh metric from a variety of sources such as the Energy Information Administration (EIA). The Ontario metric "ON(2016)" is from the Ontario Planning Outlook representing Ontario's electricity sector MT CO₂ eq.

Marginal emissions factors will be available in the Mid-Term Review Final Report following the release of the 2017 Long Term Energy Plan.

Powerful Solutions

Statement that an energy audit that considers electricity, natural gas and water usage would be the most effective method of identifying conservation opportunities. Question whether the IESO would consider funding audits to identify CDM opportunities.

The IESO funds energy audits through current programs. For residential customers, the whole home program offers both pre- and post-project audits. There is also an energy audits program available for business customers. The IESO is aware that "Green ON," will be funding a home energy walkthrough program. The IESO will continue to monitor all of these programs and determine how they can be enhanced.