

19 January 2022

Nancy Marconi, Registrar
Ontario Energy Board

VIA RESS AND EMAIL

Dear Ms Marconi:

Re: EB-2021-0002 – EGI 2022-2027 DSM – GEC/ED IRRs to BOMA Interrogatories

Please find interrogatory responses filed by GEC-ED in response to IRs from BOMA on the evidence of Energy Futures Group.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Poch', with a stylized flourish at the end.

Cc: All parties

GEC/ED Responses of Energy Futures Group to BOMA Interrogatories

2-BOMA-1-GEC/ED.1

Ref: Exhibit L.GEC/ED.1/page 6

Preamble:

Reference to “the province’s 2018 Environment Plan *“commits Ontario to achieving a GHG emissions reduction target of 30 percent below 2005 levels by 2030...and includes action to work with the Ontario Energy Board and natural gas utilities to increase the cost-effective conservation of natural gas to simultaneously reduce emissions and lower energy bills.”*

Question(s):

1. Given that emissions reductions (and lower customer bills) require absolute reductions in natural gas consumption, and that EGI has reported that only about 15% of annual savings are measured at the meter, is it recommended that gas savings for commercial buildings should be, to the greatest practical extent, verified at the meter and that DSM programs and M&V processes be designed accordingly?
2. Given the emerging evidence that natural gas consumption tends to increase over time in buildings which are not subject to conservation action, and that such increases within portfolios and segments (including K-12 schools) can substantially offset gains due to DSM programs in other buildings, is it recommended that emphasis be placed on strategic energy management programs covering whole portfolios?

Response:

1. The impacts of DSM programs, as with any other policy or program, should be measured relative to what would have occurred absent the programs. The level of gas consumption before an efficiency measure is installed is only *sometimes* a good proxy for what would have occurred absent the measure. Generally speaking, measurement of the difference in consumption pre-versus post-installation of efficiency measures – what is often called “billing analysis” in the industry – is the best approach only for estimating savings from discretionary retrofit measures and programs. Those are programs in which a customer who would not otherwise have made any investment or change (efficient or otherwise) to their building is persuaded to do so. Classic examples include customers who elect to add insulation to the attic or ceiling of their buildings, who add controls to reduce use of ventilation when it is not actually needed (e.g., when buildings are not occupied) and/or who receive education and training to improve operating practices so that less energy is wasted.

Even for discretionary retrofit measures and programs there can be factors other than the adoption of an efficiency measure or practice that affect consumption. One example is changes in occupancy that would have occurred irrespective of whether an efficiency measure is installed.¹ It would obviously not be appropriate to attribute reductions in consumption resulting from reduced occupancy to efficiency programs, just as it would not be appropriate to suggest an efficiency measure or practice did not produce savings (or worse, led to increased energy use) if consumption increased solely as a result of increased occupancy. Thus, even for discretionary retrofit programs, billing analyses may not, by themselves, be appropriate for estimating savings at individual buildings. Instead, they may be better applied to groups of buildings. They may also benefit from the use of control groups and/or other evaluation mechanisms to adjust billing analysis results.

In contrast, it is not possible to directly measure savings at the meter for DSM programs that help convince customers to buy the most efficient equipment when they are in the market to replace their boiler, water heater, oven or other appliance – what are sometimes called “time-of-replacement” programs in the efficiency industry – because the baseline for savings in such cases is a standard efficiency new appliance that they would have purchased absent the program, not the 15 or 20-year old appliance that died and needed replacing. It is also obviously not possible to directly measure savings at the meter for DSM programs designed to influence the design and efficiency of new buildings. That said, billing analyses can sometimes be useful tools for calibrating other approaches to modeling savings for “time-of-replacement” or new construction programs.

The bottom line is that there is an important place for analysis of changes in consumption “at the meter”, but such analyses also have important limitations and need to be supplemented and complemented by other evaluation, measurement and verification (EM&V) techniques.

2. Strategic energy management can be a useful efficiency program strategy. To the extent that it can be applied to portfolios of buildings managed by the same entity, the reach and therefore the effectiveness of the strategy in generating energy savings should be enhanced.

¹ This is perhaps particularly important in the current/recent context of the Covid pandemic. However, occupancy patterns can and do change even in more “normal” times.

9g-BOMA-6-GEC/ED.1

Ref: Exhibit L.GEC/ED.1/page 18

Preamble:

Section III Performance Incentives: “The inclusion of both savings and participation metrics for the Energy Performance program is inappropriate since this program should stand on its own merits, in terms of energy savings and/or other benefits provided, relative to other programs that could serve the same customers. Incentive dollars allocated to this metric should be allocated instead to savings metrics.”

Question(s):

1. While BOMA fully supports the principle that actual gas savings should be the predominant measure of effectiveness, and also that, to the greatest practical extent, savings should be measured at the meter rather than by assumption and calculation, should some degree of participation incentive be considered for this new and unfamiliar approach, which BOMA considers to be a major advancement over traditional programs, to ensure it receives the focus necessary to get it successfully off the ground?

Response:

No. Enbridge should be expected to continually explore and test new approaches to generating cost-effective efficiency savings. Such investments in new ideas are necessary to successfully evolving efficiency programming over time – particularly in the current Ontario context in which DSM plans cover fairly long time horizons (5 or 6 years or longer). It is not appropriate or practical to create shareholder incentives for participation for each potential new efficiency measure or program approach. Instead, such new approaches should be included in Enbridge’s plans and, to the extent that they show promise for significant cost-effective savings in the future (once more fully developed and tested), there should be an expectation from the Board and other parties that Enbridge will follow through on their development and implementation unless and until they are shown to not be as effective as initially anticipated.

One other option is to set aside a portion of the DSM plan budget – e.g., 3% to 5% - for pilot programs for which savings are not counted towards goals for which shareholder incentives can be earned. In this way, utilities can test new program approaches – which often have significant costs to set up and which may not provide great savings yields per dollar spent until they reach a certain scale – without incentives to shift funds away from them to maximize shareholder earnings. The utility can then transition new initiatives from pilots to full scale programs for which savings are counted towards goals once they have been demonstrated to be good candidates for such a transition. In our view, this would be a much better approach than providing shareholder incentives for new programs.

We should emphasize that we support Enbridge testing strategic energy management and other program approaches designed to improve the energy efficiency of building or facility operation and maintenance practices by business customers. We just do not think that a separate shareholder incentive for them is appropriate.