e-mail: dpoch@eelaw.ca

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 LEIN Interrogatories

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

Sincerely,

Cc: All parties

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GEC/ED Responses of Energy Futures Group to LIEN Interrogatories

2.LIEN.1-GEC/ED.1

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Regarding Energy Futures Group (EFG)'s recommendation to increase the low- income budget from \$23M to \$24.8 M in 2023 and from \$24.9M to \$30.1M in 2027 and to focus the increased spending on weatherization measures only and not natural gas equipment measures, which should only be replaced when existing equipment fails:

a) What is EFG recommending the existing gas equipment be replaced with – (i) at the time of failure, and (ii) if replaced before failure - for each of the Home Winterproofing and for the Affordable Housing Multi-Residential (AHMR) offerings?

Response:

We recommend against replacing functioning equipment before failure – what is commonly called "early retirement" in the efficiency industry. In our experience, such early retirements are rarely cost-effective. Moreover, early retirements lock in continued use of gas for 15 to 25 years or more, precluding the potential for switching to efficient electric heat pump systems at the normal time of replacement. For both of these reasons, it is better to spend limited program dollars on improvements to building envelopes in additional low income homes.

With respect to time of failure, if it is not an emergency situation, the program should consider the customer economics of switching to either a cold climate heat pump or a hybrid heat pump-furnace system. If such systems would lower lifecycle energy bills for the customer, they should be installed. If not, the most cost-effective gas heating system should be pursued. It should be noted that Canadian efficiency standards require that all new furnaces be replaced with models that have an AFUE efficiency rating of at least 95% efficient. Thus, all new models will be very energy efficient. The question is whether higher levels of efficiency are cost-effective.

¹ Note that analyses of the economics of non-hybrid cold climate heat pump solutions should include consideration of the customer economics if all other end uses were electrified at the same time, so that customers not only reduce their variable cost of gas use but also fixed monthly charges.