

November 7, 2023

Nancy Marconi

Registrar Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, Ontario M4P 1E4

Dear Ms. Marconi,

Re: Benefit-Cost Analysis Framework for Addressing Electricity System Needs EB-2023-0125

I am writing on behalf of Environmental Defence to provide comments on the draft project plan for the benefit-cost analysis ("BCA") framework. Environmental Defence commends the OEB for moving forward with this important initiative and believes that Guidehouse has made an excellent first step in preparing the draft project plan. Almost all of the draft project plan is very good. However, these comments will focus on one critical problem that has the potential to undermine efforts to implement cost-effective non-wires alternatives for many years to come and is inconsistent with the OEB's directions in *Framework for Energy Innovation: Setting a Path Forward for DER Integration* (the "FEI Report"). <sup>1</sup>

In particular, Environmental Defence asks that the primary test be adjusted to ensure that savings that accrue to a distributor's customers are accounted for, including avoided energy costs from energy efficiency. This is necessary to implement the OEB's conclusion in the FEI Report that "[t]he costs and benefits for the implementing distributor and its customers will generally be the primary consideration for making decisions about cost recovery through distribution rates." It is also necessary to minimize energy bills for customers – a key priority for the OEB and the Ontario Government.

We provide these comments as an active participant in the framework for energy innovation working group, the BCA small group, the distributed energy resources ("DER") connections working group, and utility rates cases touching on non-wires and non-pipe solutions to energy distribution needs. Environmental Defence advocates for solutions that can both reduce energy bills and greenhouse gas emissions. We approach these issues from that perspective.

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<sup>&</sup>lt;sup>1</sup> OEB, Framework for Energy Innovation: Setting a Path Forward for DER Integration, January 2023 (link).

<sup>&</sup>lt;sup>2</sup> *Ibid.* p. 4. See also p. 20 and 21.

## **Direction from the OEB**

The direction from the OEB in the FEI Report requires that the savings that accrue to a distributor's customers be included in the primary BCA calculations and test. This is clear from the executive summary and the detailed section the BCA framework. The key wording in the executive summary reads as follows (with emphasis added):

"The OEB will adopt a BCA Framework that identifies the full energy system benefits and costs of DER solutions and allows different categories of costs and benefits to be considered separately. The costs and benefits for the implementing distributor and its customers will generally be the primary consideration for making decisions about cost recovery through distribution rates."

This wording would include the savings that accrue to customers from avoided electricity consumption. This is clear for three reasons:

- The wording refers to customer benefits without restricting those benefits to avoided distribution costs.
- The wording refers to customer benefits in the context of the previous sentence referring
  to energy system benefits. In this context, the customer benefits are the energy system
  benefits accruing to the distributor's customers, which would include avoided energy
  costs.
- The wording differentiates between distributor benefits and customer benefits. Presumably the distributor benefits are the avoided distribution costs (i.e. avoided spending on wires) and the customer benefits are the avoided costs that accrue to the customer (e.g. avoided commodity costs).

We assume that Guidehouse has excluded customer avoided energy cost savings because the OEB referred to the "distribution service test" in the FEI Report. However, when read as a whole, this reference in the FEI Report does not amount to a direction to exclude avoided energy cost savings in the primary test. They key wording from section 5.4 of the FEI Report is as follows (with emphasis added):

The costs and benefits for <u>the implementing distributor's customers</u> will be the primary consideration for assessing rate funding of a DER solution.

. .

For the purpose of electricity distribution rate-setting, the OEB will be employing a multi-test approach, as described by the BCA Subgroup.

The OEB will develop and require use of a test that assesses the distribution costs and benefits, <u>similar to</u> the Distribution Service Test described in the BCA Subgroup's report. In most cases, the costs and benefits for <u>the implementing</u>

<sup>&</sup>lt;sup>3</sup> *Ibid.* p. 4.

<u>distributor's customers</u> will be the primary consideration for approving rate funding of a DER solution.

However, the OEB's intent is to encourage the development of solutions that are in the best interests of both a distributor's customers and Ontario's energy customers more broadly. For this reason, the OEB will also develop guidance on an additional test (part of the multi-test approach) that will consider appropriate energy system impacts. The results of the broader test can be used to identify an optimal solution for Ontario's energy consumers as a whole and inform appropriate levels of cost sharing between parties.

This wording would require the savings that accrue to customers from avoided electricity consumption to be included in the primary test for the following reasons (despite the reference to the distribution service test described in the BCA subgroup report):

- There is reference to a test <u>similar to</u> the distribution service test described in the BCA subgroup report. That does not require the primary test to be identical to that test nor require exclusion of avoided energy savings that accrue to a distributor's customer.
- The single brief reference to the distribution service test is made in the context of multiple unqualified statements that the primary test will account for customer benefits.
- The subsequent wording differentiates between the primary test and the energy system test based on who the benefits accrue to namely "a distributor's customers and Ontario's energy customers more broadly." It is clear that the differentiation between the two tests is *whose* benefits and costs are considered, not the type of benefits and costs to be consider (i.e. avoided distribution infrastructure versus avoided electricity consumption).
- If the OEB had intended to exclude key benefits accruing to customers in the primary test it would have said so and explained why not done so with a vague reference to the BCA Subgroup report. Nor would it have included unqualified language in multiple places in the FEI Report calling for the inclusion of distributor customer benefits and costs.

The only possible interpretation of the OEB's directions in the FEI Report, when viewed as an entirety, is that the primary test should account for all savings that accrue to a distributor's customers, including avoided energy costs.

## Problems with excluding most customer benefits

In addition to being contrary to the OEB's direction in the FEI Report, the proposed exclusion of key impacts on distribution customers in the primary test would have many negative impacts, as detailed below:

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<sup>&</sup>lt;sup>4</sup> *Ibid*. p. 21.

**Higher bills:** If avoided distribution customer energy costs are excluded from the primary test, projects will sometimes fail that test even if they would lower overall customer bills. This will occur when the cost of the traditional infrastructure solution is lower than the cost of the non-wires solution but higher than the cost of the non-wires solution after netting out the energy savings accruing to the distributor's customers. When this is the case, the primary test will reject a solution that would benefit the distributor's customers and lower energy bills.

Ruling out energy efficiency: If avoided distribution customer energy costs are excluded from the primary test, it will most often rule out energy efficiency as a non-wires alternative. Energy efficiency is often only cost-effective when the customers' avoided energy costs are considered. This is highly concerning because energy efficiency is frequently included as one component of distribution non-wires alternatives. By ruling out energy efficiency in many situations, the exclusion of avoided energy savings will rule out multi-measure non-wires alternatives that require energy efficiency measures in order to achieve the required demand reductions and/or cost savings.

**Ruling out voltage regulation:** If avoided customer energy costs are excluded from the primary test, it will most often rule out voltage regulation as a non-wires alternative, which also is often only cost-effective when the customers' avoided energy costs are considered (as in EB-2020-0249). Although voltage regulation is not as common as energy efficiency in multi-measure non-wires alternatives, it can be an important element or even the sole element in s non-wires alternative.<sup>6</sup>

**Inconsistent with OEB decisions:** The exclusion of energy savings would also be inconsistent with OEB decisions in rates cases. For example, the OEB approved the Sault Smart Grid Project based on projected savings accruing to distribution customers through reductions in energy consumption.<sup>7</sup>

**Inconsistent with IESO cost-effectiveness tests:** The exclusion of energy savings would also be inconsistent with the cost-effectiveness tests used by the IESO (i.e. the PAC, SC, TRC, and RIM) – all of which account for avoided electricity supply-side resource costs.<sup>8</sup>

## **Conclusion**

The BCA framework is incredibly important because distributed energy resources present a major opportunity to lower energy bills. Although most of the project plan is excellent, the exclusion of energy benefits in the primary test would undermine the whole initiative and turn it into a step backward from the ad hoc approach that is currently taken by distributors. We request

<sup>&</sup>lt;sup>5</sup> E4, PLMA & SEPA, *Non-Wires Alternatives, Case Studies from Leading U.S. Projects*, November 2018, p. 16 (<u>link</u>).

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> EB-2020-0249, Decision and Order, April 29, 2021, p. 4 & 10 ("The OEB finds that the SSG Project is in the public interest, delivering direct benefits to customers through reduction in energy consumption, reliability improvements and improved planning and data reporting systems." Emphasis added.)

<sup>&</sup>lt;sup>8</sup> Independent Electricity System Operator, *Cost Effectiveness Guide for Energy Efficiency*, May 16 2022, pp. 7-11 (link).

that costs and benefits accruing to a distributor's customers be accounted for so that the BCA framework will be consistent with OEB directions and to ensure that DERs will be adopted whenever they will provide overall bill reductions to a distributor's customers.

Yours truly,

Kent Elson