

November 13, 2023

Submitted electronically.

Ontario Energy Board
2300 Yonge St, 27th Floor
Toronto, ON M4P 1E4

Attn: Nancy Marconi, Registrar

Dear Ms. Marconi:

Re: EB-2023-0125 Benefit – Cost Analysis Framework for addressing electricity system needs: Project Plan & Stakeholder Engagement

The Electricity Distributors Association (EDA) appreciates the opportunity to provide comments on the Benefit Cost Analysis (“BCA”) Framework Project Plan, as presented by Ontario Energy Board (OEB) staff on October 13, 2023. The EDA represents Ontario’s local hydro utilities, the part of our electricity system closest to customers. Publicly and privately owned utilities, otherwise known as local distribution companies (LDCs), deliver electricity to residential, commercial, industrial, and institutional customers—powering every community in the province. The sector owns more than \$30 billion in electricity system infrastructure and invests more than \$2.5 billion annually in the electricity grid to meet system needs while providing safe and reliable electricity - that is the Power of Local Hydro.

BCA Handbook Project Plan Background:

On September 20, 2023, the OEB initiated a consultation regarding the development of a Benefit Cost Assessment, as a response to the objectives and plans outlined in the OEB’s Framework for Energy Innovation: Setting a Path Forward for DER Integration (“FEI”), dated January 30, 2023. The OEB’s September 20th letter notified parties of a stakeholder consultation to be held on October 13, 2023, and required that comments on materials relating to the stakeholder session be filed by November 9, 2023. On October 26, 2023, a BCA Handbook Project Plan, two PowerPoint presentations, and an accompanying cover letter were distributed to stakeholders.

We appreciate the opportunity for stakeholders to engage early with Guidehouse Canada (“Guidehouse”), and OEB staff regarding the completion of this important work. In reviewing the “BCA Handbook Outline” section of the BCA Handbook Project Plan, we noted (and Guidehouse confirmed) that the attached document represents an early draft of the intended sections of the planned draft BCA Handbook. Benefit-cost assessments are inherently complex, and the ultimate BCA Framework needs to balance workability, consistency, flexibility, and repeatability. While we request a higher degree of interpretation or categorization, we do need to consider the variability between projects, and the consistent approach for clarity.

This submission provides our comments on the materials noted, to inform Guidehouse under the oversight of OEB staff, as they move towards the completion of a full draft of the BCA Handbook planned to be released December 2023. Our members provide the following comments for additional information that could be included in the Handbook project plan to help them assess the value of DERs for meeting system needs, and we look forward to reviewing all proposed content in detail once the BCA framework is further developed.

Our comments have been organized by the four key questions to guide review of the Project Plan and BCA Handbook outline. Our members have also included a fifth section for Guidehouse's consideration in developing the draft Handbook. Recognizing that at this stage, feedback is being requested on the Project Plan, rather than the BCA Framework itself, we would like to outline our initial overall thoughts if it may be of assistance for this submission, or for forthcoming comments in December when the actual draft Framework is released, and what was included in the draft sections released on Oct 26.

1. Content: What additional information could be included in the Handbook that would help LDCs to assess the value of DERs for meeting system needs?

Our members are interested in understanding more about when the BCA is required and how the BCA should be used in the context of OEB regulatory activities. Most of the content currently addressed in the BCA Handbook Outline will be helpful for the LDCs in some circumstances but may not provide informational value in all circumstances. We support the portions of the BCA Handbook Project Plan which provide distributors **the option, but not the obligation**, to include information that the LDC deems relevant to the specifics at hand. We encourage OEB staff and Guidehouse to ensure language is not written such that an unnecessary number of items are listed as mandatory, to reflect the potential variety in avoided distribution assets and non-wires alternatives, which may rely on different information based on circumstantial specifics.

The BCA Handbook is expected to be a concise, practical, and actionable tool for LDCs to test the cost effectiveness of DER solutions as non-wires solutions (NWS) and traditional infrastructure solutions alike. Within the 30-page proposal and 6 sections, the handbook does not address the actional situation where the Distribution Service Test (DST) does not "pass" (less than 1), but the optional Energy System Test (EST) inclusive of total energy system benefits, results in an extremely cost-effective solution. We recognize that the EST will be the subject of Phase 2 of this consultation, but in terms of content considerations, **adding specific sections of content for addressing all pathways** would provide LDCs with information to assess the value of DERs to meet system needs.

The BCA Handbook Project Plan did not include a section regarding LDC planning of **timing, resources, and expectations** with respect to the technical and organizational pre-conditions of implementing non-wires alternatives. We suggest that the final BCA Handbook start with consideration for LDC resourcing requirements and development of Distribution System

Planning. LDCs seek clarity of the scenarios and timelines for when the BCA is expected to be in place, and whether LDCs have autonomy to use BCA as a tool, as was a requested outcome established during the FEI engagements. In other words, we would like confirmation that BCA is not required for all projects. We also seek to understand which characteristics would define whether a BCA should be conducted, or when it can be bypassed.

The handbook also specifies that there is likely a difference in study periods for each test, where the period for the DST is usually much shorter than the longer term (the lifetime of the DER).

Page 13 of the draft guidebook presents a section stating suitable DER solutions may include energy efficiency, demand response, or distributed supply. LDCs believe the final BCA Handbook would benefit from an area of content which outlines a short list of recognizable NWS solutions used in the marketplace today and is updated on a regular basis. Included within this section, we recommend a section that clarifies traditional energy efficiency and traditional demand response are both acceptable DER solutions where these tools can be utilized. This should include a caveat that appropriate NWAs will depend on the unique operating conditions of the LDCs, its geography, assets, and customer density, and should not be prescribed as “one size fits all” DER solutions. We encourage information sharing from the regulator for the purpose of BCAs and acceptable DERs as the industry rapidly moves forward and evolves. We also propose that materiality should be **clearly addressed** as a content section, and that stakeholder input will be critical to the establishment of appropriate materiality levels and threshold tests. Understanding when a BCA is required (or not) will be essential for LDCs to better understand the potential impact new BCA requirements will have on our existing processes. As we move forward, this will give context to whether this is only required for certain larger projects beyond a certain threshold, or for a larger suite of projects and programs included in capital planning.

2. Impacts: For the DST and EST, are the proposed impacts and their suggested applicability correctly aligned with the purpose and intent of each test?

Section 4.4 of the BCA Handbook Project Plan is robust and appears to represent a first draft as opposed to an outline, as Guidehouse indicated would be the case in some sections of the document. This section will require considerable time to review, analyze, and discuss with our members. At this time, a lack of comment on the content provided in section 4.4. should not be interpreted as an endorsement of the principles, methodologies or formulas included therein.

In our assessment, more guidance on risk assessment is needed. At a principled level, we encourage OEB staff and Guidehouse to be consistent in their approach to determining which impacts are, or are not, included in the Distribution Service Test (“DST”). For example, while we understand why the value of deferred or avoided generation capacity expansions are out of scope of the DST, it is not immediately clear why “Energy” impacts cannot be included within the DST as it relates to the energy consumption of customers within a distributor’s service

territory. While it can be argued that energy consumption reductions: a) accrue only to a subset of customers, and b) are not reflected in distribution rates, the same applies to reliability and resiliency, two impacts which are included as either required or permitted under the proposed DST. Consistent with our views on flexibility (section 5), we encourage an approach which allows impacts to be permitted wherever possible to ensure the final DST is responsive to the wide variety of potential NWS subject to the DST. Only where an impact is clearly not specific to the distributor's system or customers, or where impacts cannot as-of-yet practically be estimated, should it be marked as excluded.

The EST will require consistent updates and lead to discussion around all subjects of critical decisions raised in the FEI BCA Subgroup report such as:

- How systems and their transactions can be set up so that costs follow benefits.
- Amendments for the continuing development of the role for the future distributor which could be enhanced or facilitated by DSO configurations and the variation chosen.
- Role for OEB approving costs and benefits impacting another entity outside of a particular applicant.

These points have not been addressed in the BCA Handbook Project Plan, nor does there seem to be a path to address them.

Given its heavily weighted importance in the BCA, additional definition for discretionary vs. non-discretionary will be valuable. As we move forward, **updating references of BCA analysis and reporting back into the industry regarding BCAs will also be useful.** It may be that DERs are an ideal solution for reliability improvements (subject to the implementation of DSOs, and the expansion of RPQR); however, such investments could be deemed “discretionary” and not result in any deferral of benefits. We recommend that the use of DERs to meet reliability targets are specifically in the draft BCA Handbook. Reviewing the BCA Handbook Project Plan in its current form, BCAs through the DST appear expected to mostly rely on the benefits of deferring a capital investment. Such benefits in some cases could be relatively small and short lived. The real value of the BCA will arise due to the emergence of the EST and the use of DERs as a “post-2024 CDM” instrument.

We suggest that clarity is required with respect to cost recovery and USoA recording for the cost of preparing BCAs. Specifically, the OEB may be able to encourage the pursuit of innovation by reducing the risk to early adopting LDCs by considering Deferral Account opportunities to transfer some or all the cost of preparing a BCA from the distributor to province-wide ratepayers. To the degree early-adopters of BCAs and NWAs generate lessons learned, this yields a benefit for all ratepayers, and the costs of such should follow the benefits. This type of cost sharing would encourage LDCs to propose a BCA and not fear the burden of cost and effort should the BCA be rejected by the OEB. On a related note, LDCs would appreciate more direction with respect to entry of Operating and Capital expenditures associated with preparing a BCA into USoA accounts.

Finally, we encourage the OEB to consider producing an annual report on BCAs prepared by distributors, transmitters, or other entities to ensure knowledge sharing and the long-term development of a consistent and effective approach to BCAs for non-wires alternatives (NWA).

3. Examples: The BCA Handbook will include three summary worked examples of BCAs for different DER NWAs. What types of system needs, DER solutions, and practical constraints should these examples address? The more specific the detail that can be provided here, the better.

We support detailed examples in the framework. We recommend that this list of examples be considered for the initial BCA guidance, in addition to the one example provided in the draft. However, we also recommend that more examples be added in database format as this process continues in the future or in the form of a Report of the Board to distributors on a timely basis. Additionally, and as more BCAs are produced, adding illustrative values would provide benefits and more details about project materiality thresholds used to determine when an NWA should be considered.

Please see the following list for potential examples:

- Reliability Project in Urban Setting driven by load growth.
- System Expansion Project
- DSO Project – System benefits
- Rural community Project – Long Feeder
- Rural community Project – Disconnected from system (Island) Alternatives are diesel generator, battery backup, do nothing, or poles and wires for a second supply source.
- Photo-voltaic/Solar. Provide variable MW figures to illustrate the example, avoided distribution capacity in MW.
- Scale a 230kV Transmission Station over number of years with a proposed DER. The need for DERs is driven by load growth, intensification of population, EV, electric heat pumps and resistive heating.
- EV managed charging program summarized on page 20.
- Aggregated NWS technologies/solutions (e.g., combining an adder to a province-wide EE program targeting peak kW with one or more large scale BTM battery installations and commercial demand response) that defer the need for a new transformer station for 5-7 years.
- Provide values in table 16 and 17.
- Examples on section 4.5.1.2 and 4.5.1.3

- More details or examples on section 4.7.1.2. for alternatives for be considered for various DER projects & programs.

Such examples would be helpful, however, with the understanding of flexibility, and that each technology's impact on the system would have its own nuances with respect to costs and benefits, in addition to utility and customer specifics. As more experience is gained in BCAs and NWAs, we expect the suite of examples (real or illustrative) can be expanded and communicated outward to the industry.

4. Inputs: We expect that the most significant benefits and costs of DERs will be derived from project- and program-specific information. Are you aware of any material impacts for which generic values are available and might be used?

At this early stage of BCA Handbook development, it is difficult to comment on “generic” values for inputs for assessing generation and DER availability for system planning purposes. We are not aware of generic values which would appropriately be used in the DST at this time but welcome the opportunity to comment on any calculated or generic values provided by OEB staff's expert, Guidehouse, in the draft BCA Handbook anticipated in December 2023.

In seeking key values for inclusion in the draft BCA Handbook, we encourage Guidehouse to focus on inputs and assumptions which cannot readily be ascertained by LDCs absent the completion of expert studies. In one example, section 4.5.1.3 Resilience (Net Avoided Outage Costs) provides a calculation of the benefits associated with improved resilience, measured as avoided outage costs. This calculation will be highly reliant on an input for “Value-of-Service” (“VoS”) specific to each rate class of customers. The incomplete table below notes that “this section will be further developed in the draft BCA Framework.”

We wish to highlight that the core challenge in assessing the benefits of reliability or resilience improvement (or degradation) is determining VoS, also known as “Customer Interruption Costs” or “Value of Lost Load”. We encourage the development of a generic set of assumptions for this value, as in present context distributors are otherwise required to commission a study on the matter or rely on external sources which may not be directly reflective of Ontario or their customer base.

These studies must also incorporate an equity lens for all communities and their configurations. Provision of a baseline, generic set of assumptions in this area would remove a considerable barrier to valuable investments which impact resilience and net outage costs. Of note, however, to the degree a utility commissions its own expert study to ascertain distributor specific VoS, this evidence should be permitted as is the case for similar expert studies (e.g., Total Cost Benchmarking, Lead Lag Studies).

It should be considered whether the use of suggested categories of inputs make sense in common scenarios to reduce this risk and increase efficiency. The OEB should be encouraged to provide a working model that can be used by all LDCs to also increase efficiency and consistency for discovered consistent BCAs over the future. As the EST is developed in Phase 2, we encourage the OEB to work with the IESO and other upstream sector participants to integrate broader system inputs into an expanded BCA model.

5. Additional Considerations: Fundamental Concerns for BCA Phase 1 Handbook Outline

Appropriate Flexibility

Among the most consistent views regarding the BCA Handbook Project Plan expressed by our members, was the need to diligently balance clear guidance against necessary flexibility. The BCA Handbook Project Plan and accompanying materials highlight the importance of relying on examples to clearly articulate the circumstances under which the final BCA Handbook may be used by distributors in assessing NWS. Examples can provide a helpful tool for interpreting and implementing the final BCA Handbook; however, it is unrealistic to expect examples provided today to articulate the full breadth of possible capital investments impacted and NWS proposed in the future. Given the variability in possible circumstances, we recommend the draft and final BCA Handbook transition many areas that are currently communicated as requirements, into recommendations or best practices.

By way of example, section “4.3.2.3 Study Period” of the BCA Handbook Project Plan currently states the following:

“For the Distribution Service Test, where the DER may defer or avoid a larger non-discretionary capital investment, the study period should be the payment period for the NWS and the corresponding deferral period of the pole-and-wires solution, whichever is longer. That is, the study period should cover the period in which the utility must make any incremental payments (and receive incremental benefits) compared to what would be expected with the deployment of the default traditional poles-and-wires solution in the reference scenario.”

We submit that a prescriptive approach to Study Period as articulated above is unnecessary and may not be appropriate in some circumstances. For example, there may be circumstances where shorter-term use of an NWS could avoid a traditional capital investment entirely by deferring the investment beyond the date on which other, non-dependent capacity investments are planned to be made. In such circumstances, the appropriate Study Period would be the entire effective useful life of the avoided asset, and not the period over which the NWS payments were made. This is not to suggest that the effective useful life of impacted capital assets will always be the appropriate study period; merely, that a prescribed (as

opposed to recommended) study period stands to create unproductive perceptions of non-compliance with the final BCA Handbook.

Another example of the need for flexibility relates to the prescribed discount and inflation rates found on page 17 of the BCA Handbook Project Plan. The document dictates that distributors should use the Independent Electricity System Operator's ("IESO") standard societal discount rate of 4%, and a fixed assumption of 2% for inflation.

In the case of the former, the IESO utilizes a societal discount rate largely because it does not have its own Weighted Average Cost of Capital ("WACC"), which would otherwise be the appropriate discount rate, and is assessing investments made across multiple entities with varied WACC values of their own. Neither of these realities are true for distributors submitting applications under the final BCA Handbook. It may be appropriate in some cases for distributors to utilize a societal discount rate; however, this discretion should be left with the applying distributor based on the specifics of its proposal.

In the case of inflation assumptions, we submit that distributors should be empowered to rely on the best inflation assumptions available to them at the time of preparing business cases and submitting applications to the OEB. Recent years have shown renewed volatility in inflation, and a final BCA Handbook capable of standing the test of time should be responsive to this reality.

Implications for System Planning

We encourage OEB staff to ensure policy guidance is both consistent across all framework and guideline documents, but also ensure the appropriate authority is assigned to the appropriate policy. Section 4.2 of the BCA Handbook Project Plan outlines "Criteria for Use" of BCAs to evaluate NWS, and states that the final BCA Handbook will "...define when LDCs are required to complete a BCA...", and goes on to reference the OEB's EB-2020-0091 Decision which establishes an economic threshold below which BCA screening will not be required for Enbridge Gas Inc.

The section referenced above potentially implies that BCA screening for non-wires will be mandatory for all projects above a certain threshold and goes on to state that the final BCA Handbook will inform revisions to other OEB policies. We ask the OEB or Guidehouse to confirm that the investment size in one proposed method of binary screening factors which LDCs might consider, and that other factors can be considered if LDCs determine appropriate.

We question whether this consultation, regarding the establishment of cost-effectiveness testing for NWS, is the appropriate venue and policy document to make material determinations regarding planning processes and expectations for distributors, as opposed to broader reviews of the OEB's Chapter 2 and 5 Filing Requirements for Electricity Distributors. While an across-the-board requirement to assess all projects against NWS may prove to be a

prudent course of action in the future, these technologies and approaches are relatively new in Ontario, and such a requirement would require significant effort on the part of distributors with unclear immediate benefits. We recommend a softer approach to the integration of NWS into planning and cost-based filing requirements consistent with current filing requirements for innovation, requiring that distributors articulate how they have considered NWS and requiring an explanation to the degree they may have not pursued NWS.

Conclusion:

Considering the extensive and technical nature of the more complete portions of the BCA Handbook Project Plan, we were not able to complete a comprehensive consultation and review with our members of all details **within the time permitted between receipt of materials and the date of this submission**. As such, while the comments contained herein represent the broad views of our members, we reserve the right to comment on the full breadth of complete content provided in the draft BCA Handbook anticipated in December 2023. Moreover, we wish to clarify that a lack of comment on particular content provided in the BCA Project Plan should not be interpreted as agreement with such content. We emphasize that there will also need to be time for LDCs to develop capacity and capability to implement the envisioned BCA analysis, and that the cost to build this capacity/capability should be eligible for recovery.

Considering non-traditional benefits in assessing electricity system development alternatives might be appropriate and we hope will lead to better solutions. That analysis and process expectations need to be defined clearly up front and must be efficient to allow for the proper considerations to be made during project reviews. Further, LDCs need confidence to rely on the results of completed BCAs when choosing to proceed with a particular project.

Given the expected amount of electrification to occur in Ontario, LDCs will likely need to move quickly, and the regulatory process needs to assist in accommodating this expediency. Distributors require regulatory certainty from the Ontario Energy Board and must be enabled to make decisions that benefit our customers and our distribution networks to deliver the increased demand of the future. The OEB must maintain momentum in its efforts to adapt the regulatory framework as the sector evolves, DER adoption grows, and the division of energy distribution becomes more and more blurred. The energy transition is happening now, and the industry can not wait any longer.

Please do not hesitate to contact Brittany Ashby, Senior Regulatory Affairs Advisor, at bashby@eda-on.ca or at 416.886.4420, if you have any questions or require anything further.

Sincerely,



Ted Wigdor
Vice President, Policy, Government & Corporate Affairs