

CME Feedback on the FEIWG Reports and Subgroup Reports – EB-2021-0118

August 30, 2022

The CME support the Ontario Energy Board (OEB) in advancing the Framework for Energy Innovation (FEI) as it relates to Distributed Energy Resources (DERs) and welcomes the opportunity to comment on the FEI Working Group (FEIWG) final reports. The CME participated in the FEIWG proceedings and hence has detailed knowledge of the discussions and considerations that went into the final report. These comments emphasize those areas where the CME feel it is critical for the OEB to prioritize next steps in order to ensure that the cost-effective adoption of emerging technologies is enabled for the purpose of providing ratepayers with the lowest cost solutions to reliably meet Ontario's emerging electricity system needs.

The feedback provided in this submission is founded upon three critical factors:

- 1) The FEIWG significantly advanced the definition of the DER integration challenge, but has left many and new critical questions unanswered;
- 2) The development of the BCA framework, central to achieving our objectives for the FEI, and the associated implications on utility incentives and DER integration activities, is incomplete as stated in the reports, with much work remaining.
- 3) There continues to remain no quantitative basis establishing the "value of DERs" that underpins the need for this work.

This document first provides a context for the activities of the FEIWG to facilitate the review by the CME members and then provides specific responses to the four groups of questions posed by the OEB in their invitation to comment letter.

Context of the FEIWG Activities:

The CME understand that the FEIWG Report and the subgroup reports are the culmination of more than a year of discussion and development. In May 2021, the OEB confirmed the priority workstreams of the Framework for Energy Innovation Working Group (FEIWG) as to:

- Investigate and support utilities' use of DERs they do not own as alternatives to traditional solutions to meet distribution needs; and
- Ensure that utilities' planning is appropriately informed by DER penetration and forecasts.

The FEIWG established subgroups to work through, in greater depth, key topics as follows:

- The ***Benefit Cost Assessment (BCA) Subgroup*** was tasked with defining an approach to measure the benefits and costs of DER solutions as alternatives to traditional distribution investments.
- The ***Utility Incentive (UI) Subgroup*** was asked to explore appropriate incentives for utilities to adopt DERs for distribution uses that do not require equity investment by the utility.
- The ***DER Integration (DERI) Subgroup*** was convened to identify information about DERs that distributors require to plan and operate their systems effectively.

The delivery of the FEIWG Report to the OEB represents the completion of the work of the FEIWG while also stating that more work needs to be done.¹ The FEIWG Report identifies the overarching and cross-cutting issues that emerged from the subgroups' work, as well as recommendations for next steps the OEB should consider in relation to the priority workstreams and the broader FEI goal of facilitating cost-effective integration and use of DERs. The OEB has requested comments from interested stakeholders on the following matters related to the reports:

General

1. What is the relative priority of the issues and next steps identified by the FEIWG?

Developing a BCA Framework

2. What is the appropriate scope of a BCA Framework? In other words, should a narrow or broad set of benefits and costs be considered with respect to deployment of DERs as alternatives to traditional solutions to meet electricity distribution system needs?

Developing and implementing utility incentives

3. How might the OEB remove disincentives for utilities to adopt DER solutions?
4. Is providing incentives to distributors to facilitate adoption of DER solutions (i.e., non-wires alternatives) appropriate? Under what circumstances?
5. If incentives are appropriate, how should the OEB select/develop the form of incentive that should be available?
 - a) Are there options the Incentive Subgroup did not identify that should be considered?

Ensuring distribution planning is informed by DER adoption

6. What should the OEB consider when setting expectations to ensure distributors appropriately consider DER adoption when planning and operating their systems (e.g., industry guidance, additional filing requirements for Distribution System Plans, new requirements for reporting and sharing information)?

Feedback on Requested Matters

The primary interest of the CME is that any framework for energy innovation that may result from the OEB's initiatives should be focused on ensuring that the cost-effective adoption of emerging technologies is enabled for the purpose of providing ratepayers with the lowest cost solutions to reliably meet Ontario's emerging electricity system needs. The comments that follow reflect that perspective.

General – Q1. What is the relative priority of the issues and next steps identified by the FEIWG?

The FEIWG report identified several next step actions which were purposefully not prioritized by the FEIWG. However, while much can be initiated in parallel as the FEIWG suggests, CME believe that there are critical questions that should be answered before final policy is set and some of these have urgent implications on other initiatives in the sector. The CME suggests that the FEIWG-identified next steps could be prioritized into three areas:

- Getting the facts straight (FEIWG Next Steps 2 & 3)

¹ FEIWG Final Report, June 2022, page 4

- Informing effective planning (FEIWG Next Steps 1 & 6)
- Exploring Policy Options (FEIWG Next Steps 4, 5, & 7)

Priority #1 – Getting the facts straight (FEIWG Next Steps 2 & 3)

The FEIWG report states that “the energy sector is undergoing a significant transition.” As the FEIWG acknowledged early in its proceedings, it is important to recognize that this energy transition, as it relates to Distributed Energy Resources, stems from three factors:

- 1) The provincially set rate programs for Net Metering and the Industrial Conservation Initiative (ICI) are the only reason that DERs are a point of discussion in this province
 - These programs come at a high cost compared to the alternatives for meeting system needs, the costs of which are shifted to Class B ratepayers.²
 - Absent these rate programs, interest in DERs would substantially subside and the associated growth in rate payer costs would be moderated.
- 2) Anticipated impacts of the electrification of the economy, particularly from EV adoption, may warrant DERs in the future.³
 - EV adoption is increasing demand but also providing opportunities to shift charging away from peaks to mitigate system impacts. However, these are longer term considerations which are not materially reflected in the IESO’s current reference planning scenario.
- 3) Economic life expiry of Ontario’s generating assets, most notably the anticipated retirement of the Pickering Nuclear Generating Station, is creating a need for new generation solutions.
 - The Ministry has directed the IESO to undertake an aggressive procurement for new capacity and other measures to address the risk of inadequate supply.⁴ The IESO has stated that DERs are unlikely to be able to cost-effectively address these near-term needs.⁵

As a result, it is not clear whether this “energy sector transition” is self-imposed or has near term urgency. In this context, it behooves the OEB and the sector as a whole to produce clear cost/benefit and DER penetration assumptions under conditions that reflect a low-cost electricity system approach. This would provide clarity on the magnitude of DER considerations that are relevant to the system and hence the priority that should be awarded to applying system planning resources to addressing it.

As a result, the following two FEIWG recommendations should be given the highest priority:

2. Actively Engage in the Broader Energy Sector Policy Development Activities. As the FEIWG report states, the evolution of the energy sector is being influenced by many organizations and it would be best that these efforts lead to a cohesive, rational framework for DER integration,

² OEB Market Surveillance Panel Report, The Industrial Conservation Initiative: Evaluating its Impact and Potential Alternative Approaches, Dec 2018.

³ FEIWG Final Report, June 2022, page 4.

⁴ The IESO has been asked to increase the capacity under procurement, accelerate the procurement of new capacity, explore renewal of existing hydro assets, initiate contracts for several assets, and accelerate CDM measures, ref ministerial directives found at <https://www.ieso.ca/en/Corporate-IESO/Ministerial-Directives>, IESO LT RFP Design, June 2022.

⁵ IESO Webinar on DER Potential Study, June 22, 2022.

rather than a host of potentially inconsistent regulatory requirements.⁶ The cost effectiveness of this evolution is rooted in the governance of the sector, which was the topic of the Ministry's 2021 consultation on effective long-term planning.⁷ In response, stakeholders have made recommendations as to the role of the OEB within the governance structure to best ensure the cost-effective evolution of the sector, including considerations of the impacts of rate programs.⁸ Establishing the OEB's roles in policy development of the broader energy sector is critical to advancing the dialog on DERs.

3. Establish an Initial Framework and Template for Benefit Cost Analysis (BCA). The FEIWG report and the BCA subgroup report both identify that there are important next steps to complete before a BCA framework can be finalized, including *"the development of Ontario-specific assumptions, inputs, and methods for a BCA analysis."*⁹ The FEIWG report emphasized the need for sound and robust evidence-based policy.¹⁰ Finalizing the considerations to be included in a BCA is important to the scope of the other next steps contained in the FEIWG report.

The CME also recommends that a third initiative be prioritized by the OEB to address the second of the initial FEIWG priorities: *"to ensure that utilities' planning is appropriately informed by DER penetration and forecasts."*

The FEIWG report acknowledged that the OEB's approach being taken was stepwise and incremental.¹¹ A high-level integrated view on the drivers for DER adoption and the magnitude of costs saved, incurred, and avoided by these innovations is missing. In fact, whether DERs are cost effective options of a material scale in Ontario has not been quantifiably established. The IESO's recent DER Potential study shows that DERs may only offer 1250 MW of capacity under the IESO's current planning assumptions, and these are mostly BTM energy management solutions.¹² As a result, contrary to the FEIWG statement, it is not currently determined that *"the sector should prepare for a high DER penetration future."*¹³

New Recommendation: To best inform the OEB and potentially government with respect to policy options and their urgency, the OEB should have guidance established on where DERs may provide value and what that value may be writ large to Ontario's electricity sector, with that guidance potentially in the form of a BCA in aggregate for the province. The provision of reliable quantitative guidance from such an analysis is the important evidence-base to inform:

- The magnitude of the potential financial implications to the electricity sector to help assess the cost-benefits of the merits for DER-related initiatives of the OEB and IESO;

⁶ FEIWG Final Report, June 2022, Page 16.

⁷ Ministry of ENDM, Reviewing Ontario's long-term energy planning framework, January, 2021.

⁸ Green Ribbon Panel, Submission for the Ministry of Energy, Northern Development and Mines - review of Ontario's long term energy planning framework, 2021.

⁹ FEIWG BCA Subgroup Report, June 2022, Page 33.

¹⁰ FEIWG Final Report, June 2022, page 6.

¹¹ FEIWG Final Report, June 2022, page 3.

¹² IESO DER Potential Study webinar materials, June 22, 2022, page 24.

¹³ FEIWG Final Report, June 2022, page 4.

- The relevant scope of the BCA framework, such as the degree to which societal value elements or total electricity system value elements should be considered given their aggregated benefit;
- Discussions on the rate-basing of enabling infrastructure;¹⁴
- Available DER options and the conditions under which they may offer benefits;
- The prioritization of planning integration and coordination, alignment and coordination with the natural gas sector, and coordination of the DER Initiatives across the sector.¹⁵

Priority #2 – Informing effective planning (FEIWG Next Steps 1 & 6)

The FEIWG report emphasizes in several places that while the FEI related policies are being developed, there is an ongoing suite of initiatives and activities related to DER adoption which should not result in missed opportunities while ongoing policy development proceeds.¹⁶ While a robust policy framework requires the completion of the Priority #1 activities above, there is a need to provide as much near-term guidance as possible until the final frameworks are established. As a result, it is important for the OEB to ensure progress is made on two FEIWG recommendations:

1. Provide Further Guidance on the Role of Distributors and the Expectations of Them.

Guidance is particularly needed with respect to *“their relationship to third party DER providers and customers, and modifications to the planning and operation of their systems”* on *“practical things like how to modify the development of their next Distribution System Plan to be consistent with OEB expectations.”*

6. Establish an Initial Policy for the Sharing of Information between LDCs, DER Providers, and Customers to support distribution planning and operations. Regulated utilities would be assisted with their planning and operations in the near term if the OEB established a transitional policy for information sharing (including with respect to pilots).

Priority #3 – Exploring Policy Options (FEIWG Next Steps 4, 5, & 7)

A theme that emerged in FEIWG discussions was the need to provide due consideration of the costs to distributors of new requirements associated with accommodating DERs.¹⁷ The anticipated scale and scope of DER penetration has material impacts on the cost justification of requirements imposed on distributors and hence distributor-connected rate payers. Furthermore, the UI subgroup suggested consideration of *“the effectiveness of incentives, the costs to customers, intended and unintended consequences of different approaches, and regulatory simplicity.”*¹⁸ For these reasons, activities to address the following FEIWG recommended next steps should first be informed by the role of rate programs and the magnitude of the financial benefits of the anticipated cost-effective DER adoption, which are the subject of the recommended Priority #1 Next Steps discussed above:

¹⁴ FEIWG Final Report, June 2022, page 12.

¹⁵ FEIWG Final Report, June 2022, page 12.

¹⁶ FEIWG Final Report, June 2022, page 19.

¹⁷ FEIWG Final Report, June 2022, page 13.

¹⁸ FEIWG Final Report, June 2022, page 12

4. Remove DER Disincentives including Cost Recovery Uncertainties. We concur with the UI subgroup recommendation that understanding disincentives and cost recovery uncertainties should be prioritized over developing new incentives.¹⁹

5. Establish an Initial DER Incentives Policy including Testing Possible Incentive Structures.

7. Develop Regulatory Reporting Requirements for DERs, including RRR Filings, Applications, and other OEB Reporting.

Developing a BCA Framework - Q2. What is the appropriate scope of a BCA Framework?

The OEB's request for feedback on the *appropriate* scope of a BCA framework is a very important question laid out in both the FEIWG report and the BCA subgroup report as an area requiring OEB guidance.

These reports also lay out the importance and relevance to advancing an FEI on DER of completing the work to finalize implementable considerations to be addressed by a BCA.²⁰ While the BCA subgroup has advanced the thinking around how to approach a BCA on DERs, the work has not been sufficiently advanced in order to provide assurances that the lowest cost solutions for ratepayers will result from the process. The subgroup report defines a BCA framework as including its purpose and use, the benefits and costs to be considered in decision making, and the standardized methods, assumptions and reporting requirements.²¹ There are many risks related to how the BCA development may unfold that are embedded in the factual details of Ontario's electricity sector that, if improperly considered, could lead to higher cost solutions rather than lower costs solutions.

There are two key elements to how an *appropriate* scope for a BCA is ultimately defined:

1) Establishing the scope of a BCA Framework

The BCA subgroup report laid out a spectrum of potential scope options for the BCA framework that range from a distribution system-specific scope, through a scope involving only OEB regulated entities, and ultimately to full energy system and/or societal impacts considerations that would involve implications for the IESO and even potentially the Ministry of Energy.²² The report also identified four factors to be considered by the OEB in determining the appropriate scope: cost reduction; distributional fairness; distribution rates, and OEB jurisdiction.

While the CME support the BCA subgroup's general theme of maximizing the scope to be considered, the priority is for outcomes that ensure that the cost-effective adoption of emerging technologies is enabled for the purpose of providing ratepayers with the lowest cost solutions to reliably meet Ontario's emerging electricity system needs.

¹⁹ FEIWG Final Report, June 2022, page 12.

²⁰ FEIWG BCA Subgroup Report, June 2022, pages 3, 33

²¹ FEIWG BCA Subgroup Report, June 2022, page 3

²² FEIWG BCA Subgroup Report, June 2022, page 2

The FEIWG-identified factors that influence scope selection have considerable implications on the regulatory practices and governance of Ontario’s electricity sector:

- Degree of planning integration and information sharing among utilities (Dx, Tx, IESO, OEB, natural gas);
- Methods for assessing cost effectiveness and the validation of assumptions used;
- Confirming implications of options and their implementation across affected utilities; and,
- Methods for allocating costs to assure distributional fairness to ratepayers and cost recovery for investing utilities, including the balance between taxpayers and rate payers for societal benefits sought by policy choices.

A Framework for Energy Innovation must provide an approach and process for effectively integrating the above factors into implementation practices for all stakeholders. As a result, increasing the scope for a BCA framework has commensurately increasing implications on the governance of the sector and the roles of the sector participants. The greater the scope, the greater the need for governance reform to enable utility planning integration and the higher likelihood of achieving the desired lowest cost solutions.

2) Completing the work to define the BCA considerations will impact scope selection.

Assuring lowest cost solutions through the use of a BCA is achievable only if the BCAs are materially accurate with respect to the costs and benefits anticipated. The BCA subgroup report has clearly identified the need to complete this work, as stated earlier, as it is not yet at an implementable stage, nor even at the stage necessary to quantitatively inform decisions around what the “*appropriate*” scope of the BCA framework should be. To fully characterize the *appropriate* BCA framework, work is required to:

- Consider how Ontario’s jurisdictional specifics, governance characteristics, and rate program regimes affect BCA assumptions and hence the potential for net benefits;
- Detail the methods, standards, and assumptions required to establish validate and relevant outcomes for decision making;
- Establish the comparative decision-making framework for the analysis, to meaningfully contrast wires/pipes options against non-wires/pipes alternatives enabled by both existing vs new DERs; and
- Broaden the scope to consider both utility and non-utility owned options for completeness.

The DER experience in Ontario to date has shown that decisions based on incomplete assumptions and analysis has led to higher cost solutions for the province. The UI Subgroup has cautioned that unintended consequences should be carefully considered.²³ As a result, an imperative component of finalizing the framework is ensuring that the BCA assumptions and methods are robust and complete and can pass the rigorous evidence-base scrutiny of affected stakeholders.

Establishing the scope of the BCA as addressed earlier is also a critical factor in finalizing the above elements. As the BCA scope broadens, the suite of assumptions and validation protocols become more involved and the costs imposed on distributors (and hence ratepayers) of undertaking BCAs

²³ FEIWG UI Subgroup Report, June 2022, page 14

increases. It is therefore very important that the material economic relevance of DER penetration to the system be established and then used to inform the quantitative assumptions, as identified in the earlier discussion of the Priority #1 activities, particularly as it relates to Ontario's jurisdiction specific characteristics.

A detailed report is being developed to further inform the implementation considerations of a BCA framework for Ontario and will be provided to the OEB in September to aid them in the next steps.

Developing and implementing utility incentives – Qs 3. To 5. What form of incentives should be developed?

Upon review of the UI subgroup report, and in line with the FEIWG statement that *“The subgroup concluded that issues related to appropriate recovery of a utility's costs associated with adopting DER solutions and any disincentives for DER solutions should be addressed,”*²⁴ it is clear that the subgroup materially advanced the thinking on the relevant issues. In fact, the primary achievement of the work is the provision of greater clarity around the definition of what the incentive design challenge may be. In so doing, however, the subgroup report has raised more questions than answers with the implications dependent on how much and what kind of DERs warrant adoption.

Three factors are evident:

- 1) The mandate given to the UI Subgroup to focus on non-utility owned DERs is too narrow;
- 2) The presence and potential removal of disincentives/barriers to the cost-effective adoption of non-wires alternatives (NWA) involving DERs warrants priority investigation; and,
- 3) The need for further incentives, outside of a requirement to conduct BCAs where appropriate, is not established.

- 1) The mandate given to the UI Subgroup to focus on non-utility owned DERs is too narrow.

The FEIWG reports show that assessing the cost-effective integration of DERs is by its nature a much bigger question than the availability of third-party-owned DER solutions. Considerations may also include many options such as utility-owned DERs as well as the potential for integrated cross-utility collaborative investments such as between distributors, transmitters, and the IESO and/or with natural gas utilities. The potential implications of these broader solution options also impact on the need to assess the existing incentive models. The UI Subgroup report identifies this broader context as relevant to fully informing an appropriate approach to DER adoption.²⁵ The next steps assessment should be made in this fuller context.

- 2) The presence and potential removal of disincentives/barriers to the cost-effective adoption of NWA using DERs warrants priority investigation.

It is critical that the costs of accommodating or integrating DERs by a distributor are identified by a BCA and mechanisms for the allowable recovery are established. This is related to the BCA subgroup report that identifies a category of distribution system costs and emphasizes the need for

²⁴ FEIWG Final Report, June 2022, page 12.

²⁵ FEIWG UI Subgroup Report, June 2022, page 5.

distributional fairness of the cost recovery. The further development of the BCA framework will advance the understanding of the nature of the costs and how they should be recovered. The UI Subgroup identification of potential barriers to DER adoption that may exist in the Distribution System Code and others should be explored.

- 3) The need for further incentives, outside of a requirement to conduct BCAs where appropriate, is not established.

The general theme of the UI subgroup discussion on incentives is how the accommodation of DERs could represent a financial benefit to utilities. It is not yet established as to whether the DER adoption represents a material financial matter to utilities. Establishing a fact base around this question is the subject of the Priority #1 activities recommended earlier. It is conceivable that such incentives may not be important.

Furthermore, a regulatory option identified by the UI subgroup report is to impose a requirement on utilities to conduct BCAs for NWAs, as appropriate.²⁶ If the BCA outcomes show an NWA to be in the best interests of ratepayers, then the distributor should be required to choose that approach. Such an option will rely on a robust and materially accurate BCA framework, underscoring the importance of the recommendations made earlier, as well as an appropriate integrated system planning context that provides visibility into the requirements on the distribution system. The presence of the BCA framework may, in and of itself, address many of the challenges identified by the subgroup report. Where utility-owned DERs are optimal, the outcomes of a BCA would reflect the regulated return of capital assets that contribute to the distributors' rate payers' benefits.

Ensuring distribution planning is informed by DER adoption – Q6. How should distributors consider DER adoption?

The DERI subgroup report laid out the anticipated context for DER adoption in Ontario and identified that changes to the existing regulatory and governance framework may be required in four areas:²⁷

- Collaborative planning across all levels to establish requirements and solutions;
- The provision of information for both planning and operating purposes;
- A method for ascertaining when DERs are a cost-effective alternative for meeting system needs;
- Mechanisms for the electricity sector to recover the costs of DER solutions.

With respect to the first bullet, the DERI subgroup report identifies *“the need for greater coordination between provincial, regional, and local electricity system planning”*²⁸ and places great emphasis on the need for information to support the increasing needs to plan for DER adoption and accommodate them during operations. Furthermore, the DERI report states: *“The OEB should consider options for facilitating the exchange of information between electricity and natural gas distributors necessary for evaluating solutions that benefit both systems.”*²⁹ This recommendation underscores the importance of the FEIWG

²⁶ FEIWG UI Subgroup Report, June 2022, Page 24.

²⁷ FEIWG DERI Subgroup Report, June 2022, pages 4, 5.

²⁸ FEIWG DERI Subgroup Report, June 2022, page 7.

²⁹ FEIWG DERI Subgroup Report, June 2022, page 14.

Priority #1 next step for the OEB to actively engage in the broader energy sector policy development activities and examine the regulatory and governance framework as it relates to planning.

With respect to the second bullet above, the DERI subgroup report pointed to several possible sources for information on DER adoption, with none of them definitive or comprehensive with regards to informing the planning needs. The DERI report stated: *“Ensuring distributors are considering available information about DER adoption, identifying information gaps, and supporting a shared understanding of the probable future state should be a near-term priority for the OEB.”*³⁰ This recommendation underscores the importance of the new recommendation provided earlier in this feedback document to establish where DERs may provide value and what that value may be writ large to Ontario’s electricity sector.

Closing

The CME thank the OEB for initiating the FEIWG activities and for supporting the FEIWG’s reports that have advanced the discussion on DER integration in Ontario’s electricity system. Important work remains to establish a DER integration policy framework that ensures a cost-effective adoption of emerging technologies is enabled for the purpose of providing ratepayers with the lowest cost solutions to reliably meet Ontario’s emerging electricity system needs.

³⁰ FEIWG DERI Subgroup Report, June 2022, page 10.