CANADIAN MANUFACTURERS & EXPORTERS

MANUFACTURIERS & EXPORTATEURS DU CANADA

Canadian Manufacturers and Exporters (CME) Submission
Utility Remuneration and Responding to Distributed Energy Resources
EB-2018-0287 & EB-2018-0288

CME-MEC.CA

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Recommendations:

Recommendation #1: Five overarching principles should govern how DER costs are treated, as established by the existing regulatory framework. Principles should respond to the OEB Act with a focus on sustaining the regulated service levels defined in the DSC on a lowering cost basis for consumers.

Recommendation #2: Needs upon which the Utility Remuneration consultation is based require clarification and confirmation to ensure they are well founded**.** Clarity is required for priorities on low cost objectives, protecting the rate base, and addressing the urgency to implement DERs.

Recommendation #3: The premise for the needs that underpin the DER Integration consultation must be clarified and validated. That the rate design of the ICI is the motivation for DERs should be acknowledged explicitly within the context of this consultation.

Recommendation #4: Objectives for conducting CBAs and addressing unregulated services should be adopted for Utility Remuneration considerations**.** The objectives of these consultations should include using evidence-based analysis to protect consumers from unnecessary cost increases.

Recommendation #5: Definition of DER should be formalized, specifically in the context as to how they support system benefits, such as for dispatchable vs non-dispatchable DER. These definitions will inform when DERs should be paid for from the rate base, and which should be left to individual customers to implement.

Recommendation #6: Establish criteria for determining what should or should not be in the regulated rate base vs. the unregulated rate base. The OEB must explicitly protect consumers from unnecessary cost increases, and use that guidance to determine what DER related costs qualify to be recovered by the rate base.

Recommendation #7: Define the approach to be used to distinguish how short- vs. long-term benefits of DER are handled for rate and utility remuneration purposes. The impacts and benefits of DERs will vary with consumer adoption which may impact the creation and design of new rate structures.

Recommendation #8: The scope of the consultations should be augmented to formally include many of the above recommendations**.** The scope should explicitly state that the objectives and issues identified will be addressed by the consultation.

Background:

CME is pleased to provide input on the OEB's Utility Remuneration and Responding to Distributed Energy Resources (DER) consultation and appreciates the OEB's continued efforts to deliver an efficient regulatory system and protect ratepayers. CME believes the cost of doing business in Ontario must be reduced and CME has identified how energy policy can contribute through the following principles:

- Energy costs must be affordable, reliable, transparent and sustainable so that industry can become more competitive.
- Energy policies must be informed by evidence-based research as well as data, analysis and comparative case studies.
- Energy policies must be market-based and driven by the need to attract new investment, jobs and new growth.
- Unnecessary red tape and regulations should be eliminated.
- Policy recommendations should be adopted only if the full extent of their economic and competitiveness impacts are clearly understood and taken into account.

On September 17-19, 2019, the OEB held stakeholder meetings to help inform the scope of the consultations which CME submitted comments in response to. On February 20, 2020, the OEB held another meeting, where they summarized the feedback Staff had received. OEB Staff synthesized the stakeholder inputs into guiding principles, needs, objectives, issues, and resultant expected scope of the consultation.

CME previously provided several recommendations as follows:

1. OEB should consider the parallel consultations and protect ratepayers against cost increases.
2. Policy development must focus on total system cost reduction.
3. Ensure Ontario's supply and demand balance clearly establishes the need for any added DER capacity before it is added to the rate base.
4. Require that proposed DER options provide a total system cost and benefit analysis.
5. Ensure risks are born by the unregulated side of utilities until benefits of DERs in reducing the costs to the overall rate base are proven.
6. Create definitions for DER that reflect how they interact with the system.
7. Ensure that adequate price signals are available that reflect actual needs and drive cost benefits into the system.

We reiterate that these points remain relevant to the consultation as the OEB moves forward. Upon consideration of the Feb 20th meeting and the materials provided by the OEB, we offer several recommendations against the guiding principles, needs, objectives, issues, and resultant expected scope of the consultation:

1. Five overarching principles should govern how DER costs are treated, as established by the existing regulatory framework.
2. Needs upon which the Utility Remuneration consultation is based require clarification and confirmation to ensure they are well founded.
3. The premise for the needs that underpin the DER Integration consultation must be clarified and validated.

4. Objectives for conducting CBAs and addressing unregulated services should be adopted for Utility Remuneration considerations.
5. Definition of DER should be formalized, specifically in the context as to how they support system benefits, such as for dispatchable vs non-dispatchable DER.
6. Establish criteria for determining what should or should not be in the regulated rate base vs. the unregulated rate base.
7. Define the approach to be used to distinguish how short- vs. long-term benefits of DER are handled for rate and utility remuneration purposes.
8. The scope of the consultations should be augmented to formally include addressing the identified objectives and issues**.**

Guiding Principles:

We believe several themes are important to the issues being addressed by this consultation and should form the basis for the guiding principles. Exhibit 1 contrasts the guiding principles that CME has established for its energy polices with those outlined by the OEB materials. Based on this assessment, we make the following recommendation.

Recommendation #1 - Five overarching principles should govern how DER costs are treated, as established by the existing regulatory framework.

a) DER, and any innovation, should sustain the regulated services levels defined in the DSC on a lowering cost basis for consumers.
b) Any approach that would increase costs should not be eligible for rate-based cost recovery.
c) Cost shifting between ratepayer classes should not occur unless predicated on a beneficiary pays consideration.
d) Beneficiary pays principle should apply to all DER implementations and reflect recovering the full impact on total system costs.
e) Decisions and policies must be informed by evidence-based research and analysis.

While several factors motivate these guiding principles as described in our previous submissions, the foremost driver is that guiding principles should be rooted in the mandate of the OEB.

The OEB mandate from the Ontario Energy Board Act, 1998, as currently amended, sets in Section 1 that the first two board objectives for electricity are:[1]

1. To inform consumers and protect their interests with respect to prices and the adequacy, reliability and quality of electricity service.
2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

There is no element here that says anything about “choice” or “value”. As advocates for consumer interests CME and AMPCO stated in September[2], consumers do not want choice or new “value”, they want an ever-decreasing cost of the electricity services they have come to utilize.

[1] Ontario Energy Board Act, 1998, Section 1
[2] OEB Utility Remuneration and Responding to DER Consultation, September 17-19, 2019

The second mandate in the OEB Act addresses *economic efficiency and cost effectiveness* with the express purpose to: *Facilitate the maintenance of a financially viable electricity industry*. We believe it is incumbent upon the utilities to demonstrate that they are being good stewards of delivering the *adequacy, reliability and quality of the electricity services*, as defined by the DSC, and to provide such stewardship in the most efficient and cost-effective manner they can. This should be conducted with a very clear eye on the first priority: ***to sustain the regulated services levels defined in the DSC on a lowering cost basis for consumers.***[3]

To fully advance this consultation, two different paradigms that must be recognized:

a) The regulated rate base.
b) The unregulated areas for additional services and "value".

Our consumer interests are focused on ensuring that the regulated rate base is protected from any consequential effects that may spill over from the pursuit by others of "unregulated" activities. We recognize that stakeholders should be free to conduct any "unregulated" activities. However, this freedom should be limited in so far as they do not impact on the adequacy, reliability, quality and cost of services to regulated rate payers.

Needs:

The OEB materials characterize how this consultation has two distinct parts that are motivated by separate needs:

1. Utility Remuneration is about activities that utilities undertake and how their incentives should be structured so that they make investments in the interest of rate payers;
2. DER Integration addresses how unregulated DER assets in the market place could be best used by the system.

The OEB has provided needs statements that form the underpinnings of the objectives of these consultations. As such, it is important that there is a consensus on their legitimacy. Several recommendations are provided to confirm and validate the needs statements and the premise that they are founded upon.

Recommendations #2: Needs upon which the Utility Remuneration consultation is based require clarification and confirmation to ensure they are well founded.

CME previously provided several recommendations to which these "needs" are not fully responsive as illustrated in Exhibit 2. There are three things that need to be clarified and which the need statement should support:

1. Low-cost objectives on a total system cost basis
2. Framework for utility remuneration should only include DER choices that reduce ratepayer total bill costs in the regulated rate base.

[3] For clarity, any rate-based implementation should reduce the bill impacts of total system costs whereby total system cost includes all elements that factor into regulated rate elements of consumer bills. These costs include generation, transmission, distribution and the activities of the IESO. For clarity, regulated elements include the RPP and the related administration of the Global Adjustment as it applies to all rate classes.

3. Urgency to address utility remuneration must be clearly established by a CBA, absent the distorting influences of the ICI and net metering programs.

To the extent that the needs are clarified to reflect these statements then the needs proposed by the OEB are appropriate.

Recommendations #3*:* The premise for the needs that underpin the DER Integration consultation must be clarified and validated. The needs statements and/or supporting rationale should more clearly articulate the following:

Consumers are primarily adopting DER to *take advantage* of the ICI and net metering programs, *not* for any other energy needs. The OEB offers that "Consumers are adopting DERs to meet their own energy needs" as the driver for why system planning and control efforts should accommodate DERs. CME very clearly stated that consumers don't want DER, they want lower costs.[4]

It should be made very clear that the reason DER is currently being installed is to take advantage of the ICI and net metering policies. Both of these violate the recommended guiding principles in that they are causing cost shifting between rate payers without any net system cost benefit. The excessive cost of current DER penetration is currently being borne on the backs of Class B rate payers.[5] We suggest the OEB consider the rate designs that are the root cause behind the costly proliferation of DER that is negatively impacting rate payers before prioritizing how to propagate it further.

Objectives:

We agree with the OEB that an overarching objective should be that consumers continue to be appropriately protected and that "customer choice" does not negatively impact others. Impacts to be avoided, as defined in the guiding principles suggested above, include impacts that increase the bill and/or shift cost to other rate payers.

The objectives need to be rephrased to capture the appropriate definitions and use of terms described earlier (e.g. emphasize cost reduction, not "value" or "cost effectiveness").

Recommendations #4*:* Objectives for conducting CBAs and addressing unregulated services should be adopted for Utility Remuneration considerations:

a) CBAs are used to backstop recommended actions regarding DERs with evidence-based decision-making criteria and that such CBAs must demonstrate a lowering of consumer bills for the same or better services.
b) New services that come with additional costs and are desired by some select customers who are willing to pay for them should be unregulated and that the utilities take the risk for these undertakings.

[4] CME, Response to OEB Utility Remuneration and Responding to Distributed Energy Resources (DER) Consultation, September 2019
[5] OEB, MSP Report on the Industrial Conservation Initiative, 2018

Issues:

The issues as summarized in the OEB materials reflect an appropriate set of questions with the caveat that interpretation of the desired "outcomes" requires work to achieve greater specificity and confirm alignment with the guiding principles. Several other issues warrant identification:

Recommendations #5: Definition of DER should be formalized, specifically in the context as to how they support system benefits, such as dispatchable vs non-dispatchable DER.

a) Dispatchable resources allows the system to determine the optimal use of the resource to meet system needs.
   Dispatchable DERs are those that can be turned on or off by the local utility or IESO. These are more desirable due to the flexibility they offer to meet system needs as the IESO has suggested.[6]
b) Non-dispatchable, at best, represents a difference in behavior that the system may not expect.
   Non-dispatchable DERs, such as roof-top solar, cannot be controlled by system operators. How their behavior differs from traditional loads that have been assumed in distribution system planning needs to be understood. Changes to assumed load behavior can lead to unanticipated costs, such as how residential EV charger deployment may overload some residential feeders. A new rate class may be required to reflect the incremental system costs of managing the new behavior. There may be a need to assume a future scale up to avoid the scenario where early adopters get a free-ride while later adopters have to pay a disproportionally high sum or be precluded.

Some issues may only arise with scale of implementation and these may extend up to the IESO managed bulk system. When such devices get connected, their intended behavior should be identified so that proper full system cost implications can be applied to assert the beneficiary pays principle.

Recommendations #6*:* Establish criteria for determining what should or should not be in the regulated rate base vs. the unregulated rate base.

The rate base is not the guinea pig for unproven innovations and ratepayers should not be expected to take on the risk of new technologies by paying for them until their benefits have been proven. New and untested innovations belong as unregulated commercial services until benefits are proven to reduce costs on a CBA and business case basis.

Recommendations #7*:* Define the approach to be used to distinguish how short- vs. long-term benefits of DER are handled for rate and utility remuneration purposes. In the near term, some consumers may desire some DER enabled services and may be willing to pay the cost. However, "beneficiary pays" may make it exorbitantly expensive for the first users. However, as the scale of usage increases (e.g. more consumers want the services), then it may become more and more economical. Until the scale of consumers grows sufficiently to warrant inclusion in the rate base, the cost and pace of penetration must be resolved to protect other rate payers.

[6] IESO Energy Storage Advisory Group, Storage Design Project (SDP): Overview of Interim Design Features

Guiding principles are such that no rate payers should see its costs rise for getting the services it is used to. This situation is analogous to the debate within condo buildings today about the costs to all residents of adding infrastructure to enable EV charging for a few residents. In the beginning beneficiary pays principles suggest that the few EV owners should be responsible for the cost of adding EV charging infrastructure, but as EV adoption grows, more and more residents would benefit from added infrastructure. The question becomes when should common element fees pick up these costs?

Scope:

The scope of the consultation should be clarified to explicitly address all of the objectives and issues presented by the OEB and those identified above. Otherwise the outcomes of the consultation will be insufficient to move forward in a manner that satisfies the guiding principles. There are additional areas that the consultations need to explore.

Recommendations #8*:* The scope of the consultations should be augmented to include:

a) Validate the need for utility remuneration to accommodate DERs by establishing the contextual factors necessary to begin a conversation on revenue requirements and ROI:
   - What is the view on system needs and benefits related to DERs, expected savings and anticipated costs, and when these savings will become material to rate payers and outweigh cost risks?
   - What problems may DERs be suitable solutions for? Are existing DERs causing these problems?
   - What hurdles exist right now that are inhibiting the realization of what benefits to rate payers? What hurdles may arise in the future and when?

CME suspects that DERs offer limited opportunities for cost benefit to rate payers at the current time.

b) Develop the business case for articulating utility revenue requirements and warranted return on investments. Of specific consideration is the scale of anticipated implementations that would drive the level of expenditures, investments, and potential benefits. These considerations are germane to all revenue requirements questions.
c) For responding to DERs, the scope must include assessment of what should or shouldn't be included in the rate base, as described above.
   Without that, seeking the answers to many of the recommended scope questions identified by the OEB staff will not be tractable.
d) New behaviors by consumers should only be accommodated on a beneficiary pays principle. From a technical perspective, DER behaviors typically vary from that expected from traditional loads assumed in distribution system planning and they need to be understood. This variation in behavior, whether due to BTM DER storage ICI load displacement technologies or solar net metering implementations, can cause limitations on feeder designs and system response. This principle extends similarly to EV charging stations whereby there are limits to how many the existing infrastructure can safely support without upgrades.
e) Rate design implications in general and those of new resources must be addressed within this scope, not excluded.

Rate designs are currently masking the true costs of DER, which are currently being borne by Class B ratepayers as mentioned earlier. A long-term framework for addressing DER adoption is impossible to resolve without considering how rates are incentivizing BTM behaviors.
The OEB has identified the need to assess the implications of new resources on rules, requirements and rate setting as being essential elements of DER integration.[7] Understanding what the essential characteristics are of these "new resources" is essential to framing the possible rate structure options as well as the total system cost impacts that will be essential in any DER CBAs.
Furthermore, since the ICI is responsible for most DER adoption, it seems prudent to address the policy framework for industrial rates before making sweeping changes to the regulatory system that may or may not be needed if DER adoption slowed.

f) Active coordination with other consultations is required
In the February 20th materials, the OEB listed 10 consultations that are proceeding at the OEB and the IESO. There are many cross dependencies between the various consultations that have mutual ramifications, particularly as they related to planning, operations, and pricing. Of particular concern to CME are the issues similar to those identified here that have been raised in the DER connections review. Many of them have been deferred for consideration in this consultation. Resolution of factors related to total system cost and cost shifting implications will impact back on the connections review consultation as they proceed to design minimum requirements for application forms used to drive cost impact assessments. It is unclear as to how this issue coordination will occur or if it even will at all.
Similarly, the IESO examination of DERs, such as the ESAG activities, have relevant learnings, such as the importance of dispatchable resources, and may help inform CBAs and definitions. Specific tag points should be reflected in the work plans of all OEB consultations to ensure a uniform baseline of definitions, assumptions and priorities is considered by all. To do so may require a more formalized parent consultation to ensure this commonality. Absent such, the process will be inefficient and be at risk of leading to unfavorable outcomes.

CME is concerned that without addressing these issues, significant risks to ratepayers may be emerging that are reminiscent of the cost consequences of the Green Energy Act. Under the GEA, ratepayers became responsible for the cost of new technologies that did not benefit the system, with these increased costs becoming locked into the global adjustment, the driving cost component of Class B rates.

As expressed in CME's initial submission to this consultation, these cost increases have placed Ontario manufacturers at significant competitive disadvantage with respect to the competition in neighboring jurisdictions. Ontario costs need to come down, not go up.

[7] OEB Utility Remuneration and Responding to DER Consultation presentation, February 20th, page 53

Exhibit 1 – CME Principles vs. OEB Synthesized Principles

OEB Guiding Principle	Description	CME Guiding Principles: Affordable, reliable, transparent and sustainable costs so industry can be competitive	Policies must be informed by evidence-based research and analysis	Policies must be market-based and driven by need to attract new investment, jobs, growth	Unnecessary red tape and regulations should be eliminated	Recommendations should only be adopted if full extent of economic impact is understood	Notes
Economic Efficiency and Perofrmance	Promotes cost effectiveness, safety, reliability, service quality and LT value for consumers	○	✗		✓	✗	This appears to rephrase the OEB act. "Value" should be lower cost electricity. Absent definition, evidence-based analysis is not possible.
Consumer Centric	Prioritizes cost containment and demonstrable value to consumers	○	✗			✗	"Cost containment" is not cost reduction, and "value" is not low cost. Absent definition, evidence-based analysis is not possible
	Enables greater consumer choice, empowers efficient investment decisions	✗		✗		○	Greater consumer choice not desired unless it lowers cost. Efficient investment decisions implies understanding full extent of economic impacts.
	Increases consumer confidence	✓	○	✓	✓	✓	Consumer confidence depends on evidence-based analysis that keeps costs competitive.
Stable Yet Evolving Sector	Enbles participants to adapt to change			○			Ability to adapt to change consistent with market-based drivers.
	Maintains opportunity for utilities to earn fair return	✓	○			○	Helps keep electricity industry competitive and incents appropriate investments. Evidence based analysis during rate hearing warranted.
	Neither precludes alternative business models or impedes new entry			✓		○	Only if these business models or new entry make economic sense.
	Optimal use of existing assets while new tech is adopted	○	○	○			"Optimal" not defined, should be the benefits of new approaches outweight the costs of stranded assets. Needs a business case.
Regulatory Effectiveness	Practical administration in terms of cost and complexity				✓		
	Predictable, applied consistently in similar circumstances				✓		
	Adaptable, flexible, and sustainable	✓		✓		○	Sustainable market-based system requires flexibility etc.

Exhibit 2 – CME Recommendations vs. OEB Synthesized Needs, Objectives, and Issues

			Recommendations											
			1. OEB should protect ratepayers against cost increases			2. Total system cost focus	3. Forecast to provide context for DER need	4. Total system cost and benefit analysis	5. Utilities bear risks	6. Define DER according to system impact	7. Appropriate rate design is essential	Additional Consideration	Notes
	Scope Relevance	Description	1a) Customer choice should not create costs	b) DER where it is lower cost	c) Parallel consultations creates risks								
Needs	Renumeration	Consider all viable options maximizing customer value	O	O		O		O	✗	✗		✓	Value means lower cost on a total system cost/ratepayer basis, otherwise utilities bear risk in unregulated services. Business cases to be provided.
		Give regulator appropriate tools				O	O	O	O			✓	Regulator needs visibility into total system cost issues and distinction between regulated and unregulated costs (avoid creep).
		Manage evolving risks			O	O	O		O	✗		✓	Risks to electricity system of DER solutions need to be assessed. DERs without proven benefits to lower cost should only be implemented on an unregulated basis
		Review Utility Remuneraton in context of broader rate setting framework		O	O	O			O		O	✓	Holistic improvments to rate setting process involve other consultations e.g. other OEB, IESO, Gov consultations. Remuneration needs to distinguish between regulated and unregulated practices.
	DER Integration	System planning to consider DER adoption to maximize consumer value	✗	O	O	O	O	O	✗	O			Consumer value, but no specific mention of total system cost or a DER need. Value should mean lower cost to all ratepayers and not involve cost shifting. Not addressing that utilities should bear the risk.
		Utilities to leverage available DER to maximize value		O		O		O	✗			O	Clarify that need is how to take advantage of existing DERs, as opposed to need to take advantage.
		Share info to encourage DER where best value		O	O		O	O	✗			✓	No specific mention of load forecast but still relevant to getting DER where it makes sense. System level considerations (e.g. IESO) are not addressed.
Objectives	Renumeration	Incentives are effective (greater efficiencies and cost-effectiveness)	O	O		O			O			✓	Incentivizing utilities should include keeping total system cost low.
		Consider all viable and practicable options	O	O		O		O	✗	✗		✓	Viable options implies a cost/benefit analysis of sorts.
	Both	Strengthen focus on cost effectiveness and value	✗	O		O	✗	O				✓	Value and effectivenss should include lower total system cost and looking at CBA is important to determine value. Not clear if system level needs are considered.
		Consumer protection; Customer choice not negatively impact others	✓			O					✓	✓	Implies consumer rates are not increased, or benefits are for everyone.
	DER Integration	DER adoption to enhance overall energy consumer value				O		O				✗	Value should imply lower total ratepayer costs. Not clear if this objective is to increase DER adoption.
		Optimize infrastructure use				O	O	O				✗	Optimal infrastructure utilization implies total system cost focus; underutilized and stranded assets should be avoided until CBA suggests otherwise. Appears DER adoption growth is implicit in this objective, which we disagree with. Will not grow if rate design is fixed (e.g. ICI)
Issues	Renumeration	Incentivize desired outcomes	O	O		O		O				✓	Desired outcomes should imply total system cost and benefits comparison.
		Appropriate risk allocation					O		✓			✓	Should mean unregulated utilities business bear risk until benefits are proven.
	Both	Performance measures				O		O				✓	Total system cost and benefits should be part of measures.
		Roles & Responsibilities	✓		O				O		O	✓	Should involve all agencies when deciding roles, specifically mentions protecting consumers.
	DER Integration	Value, Costs, and Benefits		O		✓		✓		O		✓	Should specifically mention total system costs and benefits.
		Planning & Operations		O	✓	O	✓	O				✓	Better coordination must include IESO/MENDM, least-cost/greatest value should mean total system cost considerations.
		Price Signals & Cost Recovery	O		✓		O	O	O		✓	✓	Fair costs means rates are kept in unregulated base until benefits are proven and a need for DER is identified by system planning.
	Stranded Assets		✓			✓	✓	✓					Avoiding stranded assets should be a priority, which includes protecting consumers, and will keep total system costs down.