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Ontario Energy Board
2300 Yonge Street
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Attn: Ritchie Murray, Acting Registrar

Dear Mr. Murray:

Re: EB-2025-0268 – Valuation of Distributed Energy Resources – SEC Submissions

We are counsel to the School Energy Coalition ("SEC"). Pursuant to the OEB's letter of October 27, 2025, these are SEC's submissions in this consultation.

Introduction

Schools are first and foremost substantial load customers, and so look at all issues, at least in part, from a purchasing customer's point of view. On the other hand, many schools are themselves generators of electricity (mostly solar), and many are also actively involved in load management and energy efficiency for invidividual buildings and fleets of buildings.

Schools also take an unusually long term approach to energy policy issues such as these. Schools will be around for a long time, and solutions implemented today will affect schools far into the future. The combination of being on both sides of the economic transactions implicit in DERs, and being concerned with economic efficiency and value over the long term, means that schools can perhaps bring a unique perspective to this discussion.

It is in this context that SEC has reviewed the very useful materials provided by OEB Staff (including the excellent report from the Brattle Group), and attended the stakeholder session where these issues were discussed. We note that it was clear from the stakeholder session that there are many stakeholders with strong technical knowledge, and whose input may thus be particularly useful to the OEB.

SEC also approaches this with the understanding that this consultation is one further step towards the distributed generation goal. We assume that there will be many further steps, and perfection is not required today. If there is anything to be learned from the experiences

of juridictions like Australia, New York, California, and Hawaii, all much further advanced in these areas than we are, it is that there will be steps in the right direction, then experience, then adjustments, and then further steps in the right direction, and so on. This consultation is a strong movement along that path.

These submissions do not deal with all of the questions posed by OEB Staff, but rather focus on concepts and issues that are of concern to schools. However, failure to comment on any of the discussion items indicates neither disinterest, nor agreement with OEB Staff proposals. We are limiting our comments to those items in which we feel we have the ability to add value.

General Assumptions

SEC starts with the (perhaps obvious) assumption that load customers pay all of the costs of the system associated with DERs, including the incentives to promote them. DERs are, as the name implies, energy resources. Sometimes it is the host of the DER that is the load customer paying the cost (as in load displacement generation), and sometimes it is other load customers who pay to incent or compensate DER providers. It is always load customers. Energy resources exist to supply load.

It follows from that:

- Overcompensation of DERs increases the costs to load customers with little benefit (at least in the short term), and;

- Undercompensation of DERs limits the rollout of a valuable energy resource and therefore increases commodity and system costs to load customers over time.

Schools believe that the ultimate goal of DER compensation is to find the sweet spot.

That, however, does not deal with timing differences. Load customers pay for many things, and not all of them provide immediate dollar for dollar value to those customers. A good example is the capital contribution regime in the Distribution System Code. New customers are expected to deliver future value, so existing customers essentially “invest” in the system – paying expansion costs today – on the expectation of receiving value in the future. The regulator’s responsibility is to ensure that the investments of the existing customers will generally produce the expected return, and the new customers will not pay excess capital contributions relative to the long-term value they deliver.

The same is true with DERs. Not all benefits of DERs are immediate, yet all have to be valued. In the longer term, load customers who pay for the DERs should get a benefit equal to their current cost.

But there is a further wrinkle with DERs, because sometimes it is necessary to pay extra simply to make DERs happen. We all benefit from that in the long term, but we never get value equal to that extra cost. That extra cost is a payment for a purpose, i.e. to cause a result to happen (see below). It is still worth spending the money, but it is a different calculus.

All of this is to achieve what SEC assumes to be the goal of any DER policy or value analysis: to improve the extent to which energy resources are a) closer to load, and b) as much as possible following or matching load.

In a perfect (theoretical) world, every load customer generates all of their own electricity, exactly when they need it. The closer we get to that paradigm (not really very close, but still…), the lower our network costs, both in the bulk system and in local distribution. Further, since new centralized generation can be expensive, DERs can improve our commodity costs.

SEC therefore looks at the issues in this consultation not as "being fair to DER providers", even though schools, as sometimes DER providers, are concerned about that as well. Instead, SEC looks at these issues as seeking to produce the best long term result for load customers like schools. If that result is achieved, everyone wins anyway.

Value-Driven vs. Purpose-Driven

The Brattle Report (page 9) suggests as Principle #1 that cost-effectiveness and economic efficiency are an immediate and primary goal.

SEC does not agree.

The Principle is stated as:

> *"PRINCIPLE 1: A COMPENSATION MECHANISM SHOULD ADVANCE ECONOMIC EFFICIENCY IN A COST-EFFECTIVE MANNER"*
>
> *"…a DER compensation mechanism should provide sufficient compensation resulting in the participation of all cost-effective DERs; at the same time, the compensation should not be so high that it causes a cost shift to non-participating customers."*

They go on to talk about the value of marginal cost pricing.

SEC believes a more appropriate principle would distinguish between value-driven policies, pricing, and compensation, and purpose-driven policies, pricing, and compensation.

In the former, you are paid the value you deliver to the payor. The question is, "How much value are you delivering right now?"

In the latter, you are paid whatever is necessary to produce the desired result. The question is "How much do you have to be paid to do what we believe is in the public interest?"

It would be nice if the answers to the two questions were always the same, but they are not.

As can be seen from the jurisdictional scan and many other external sources, every jurisdiction that has had good success rolling out DERs has implemented some form of purpose-driven compensation mechanisms. In essence, they overpay for the immediate value of DERs (or specific types of DERs) because they want to produce a particular result, usually rollout momentum for DERs. A large part of their success has come from being

"overly generous" when they needed to make stuff happen, and then to gradually cut back to a more value-driven approach as the installed base grew.

It is important to emphasize that value is the ultimate goal. Load customers have no burning desire to pay for DERs simply because they are "good things". On the other hand, load customers want a robust rollout of DERs at all levels, because they believe (correctly) that the rollout will eventually produce net benefits for those customers. If they need to pay a small amount extra today to make that happen, that is a worthwhile price to day.

SEC notes that it is this principle that drives most conservation and efficiency programs (DSM, CDM, eDSM, etc.). Unlike the principle espoused in the Brattle Report, non-participants do in fact bear the costs of those programs, because society receives a long term benefit. Marginal cost pricing has been rejected explicitly in that context. It is the overall result that is worth the cost.

It is submitted that the OEB should not adopt value-driven policies, pricing, and compensation to the exclusion of purpose-driven policies, pricing, and compensation. It is very important that the regulator be clear on which type of approach (value vs. purpose) is being used at any given time (particularly when it comes to pricing), but purpose-driven approaches play an important role, and will be essential if DERs are to reach their full potential and benefit all customers.

The Value Stack

The materials provided by OEB Staff and in the Brattle Report provide a lot of useful information on the value stack, both in terms of what values exist, and how they are or should be compensated.

Comprehensiveness. SEC has three comments on the comprehensiveness of the value stack of DERs.

First, we were surprised not to see a detailed discussion of the value of central control of DERs. This essentially devolves to the concept of dispatchability, which in a real-time system should have value over and above the other attributes of the resource in question.

For example, a school board with a fleet of solar/battery hybrid systems that is responding to price signals has significant value. If that fleet of batteries is under the control of the system operator (whether LDC or IESO), the value of that resource should be higher. There is a probability that DERs will respond to price signals. There is a higher probability that, when the system operator flips the switch, the DER will deliver.

The Brattle Report recognizes (page 11) the value of visibility to the system operator. However, it is not clear to us that the value of ceding control is properly recognized and monetized. Many DER owners will not want to cede control, and that is fine. Those that do should have the value of that step recognized.

Second, we are concerned that ancillary services are not being valued at this time. We agree with the general statement that the value of ancillary services is usually quite low. On the other hand, when they matter, the value is quite high.

We note that Australia values ancillary services, and in the past other jurisdictions (California comes to mind) have found that when they are needed, ancillary services are very valuable. This can be particularly true in some cases where a system is dominated by nuclear, which has some limitations of its own and gets value from those ancillary services.

Third, the Brattle Report and the OEB Staff materials assume that the value of Tx and Dx capacity is zero at any time there are no system constraints that need to be addressed.

SEC disagrees. This is exactly why marginal cost pricing is problematic. In our view, starting with a constraint and finding value in overcoming it is the wrong order of actions.

Simply put, a DER that will reduce Dx or Tx capacity needs in the future is delivering value by doing so. Since in most cases a DER will reduce Dx and Tx capacity needs sooner or later (it is the fundamental nature of distributed energy resources), that value can never be zero. It may be low, in situations in which there is a lot of excess wires capacity, but sooner or later in any growing system the existence of that DER will reduce the need to invest in the system.

It is possible that the value of Tx or Dx capacity for a particular DER will be *de minimis*, but in our view even if that is the case, the value should never be treated as zero. That leads to an incorrect analytical approach in which system capacity starts with a problem, rather than starting with a plan to limit future problems before they happen.

The easiest analogy is to home insulation. We insulate homes in the spring, when there is no immediate need to do so. That is because we expect that sooner or later it will get cold (or in some places hot), and that insulation will produce benefits that are not true today. Similarly, we seek to deploy DERs because, sooner or later, we will need to spend money on new Tx/Dx infrastructure, and we can build less at that time if we have more DERs.

***Too Complicated*.** Implicit in a lot of the discussion is that navigating the myriad of programs and pricing for DERs is very complicated. That is no doubt true.

For companies in the DER business, this is not really a problem. Just like large users of natural gas have systems (and consultants) in place to navigate the rules and optimize value, so too the larger DER companies are on top of the complex series of policies, prices, and programs that relate to them. They have to be. That is not to say it is easy, but it is a challenge that comes with the territory.

For DERs to be successful in the longer term, however, adoption has to move down to smaller commercial, industrial, institutional and residential owners and hosts. For a hundred DER companies, the complications are manageable. For the hundreds of thousands of future owners and hosts that will make DERs successful, the complications are a significant barrier.

SEC notes that IESO and Enbridge have recently introduced the “One Window” approach to residential conservation programs, designed to ameliorate a similar problem in DSM/eDSM. Not only does it provide a single entry-point at the retail level for those interested in conservation, but along the way it incents the providers of those programs to make them more consistent and easier to understand.

SEC believes that a similar approach may have value in the context of DERs. Step One may be a pilot in which a specific retail sector has access to a dedicated resource team (perhaps at IESO) that will ensure that all available components of the value stack are made available for the particular DERs they want to consider.

We acknowledge that this is a temporary solution. In the longer term, the policy, pricing, and program systems should be co-ordinated in such a way that this is no longer a barrier. That is not the case today.

If a school board wants to maximize the value of their rooftop solar resource, add storage capabilities, and co-ordinate it all with their load management system, they have to hire dedicated people out of limited budgets to do that. The students, and their parents, do not want them to close libraries in order to do that, even if they agree that the long-term benefits are worth the investment.

In a commercial establishment, it is not in the public interest that the end-user reject "too complicated" DERs because it is easier for them to implement the new HR system their staff are already promoting.

Therefore, SEC proposes that the OEB recommend a "One Window" pilot for smaller DERs.

Net Metering vs. Net Billing

SEC generally agrees with the concept of shifting from net metering to net billing, an idea proposed by OEB Staff. The key will be to implement it in a thoughtful way, with a gradual transition in pricing and strong supports for the goals that could be achieved.

Net metering is a pricing policy that emphasizes simplicity over economic efficiency. The result in some jurisdictions has been that some load customers with BTM generation have not paid their fair share of system costs. Those jurisdictions have shifted to net billing for that purpose.

Net billing essentially values the drawdowns from the system at the value as they are drawn down, and the injections into the system at the value as they are injected. Since neither of those values are real-time (they are a relic of the respective pricing systems), net billing is not perfect either, but it is much closer to fairly valuing the load vs. generation aspects of the customer's activities.

If the immediate goal of moving to net billing is to improve (i.e. reduce) the value compensation for these DERs, it is important not to ignore the other goal: load following and storage.

Net billing can be an incentive to inject into the system at times of maximum value, in order to either improve the economics of the DER, or ameliorate the negative effects of shifting away from net metering. That does not work in the case of "at will" generation – naked solar, for example – but it does work where the DER can be managed. In many cases, that involves adding storage, which itself is an important goal.

SEC believes that the OEB should recommend three things to ensure that the shift to net billing produces positive results:

- ***Make the shift gradual.*** This has been successful in other jurisdictions that didn't want to dampen the momentum supporting DERs, but still wanted to move to a more value-driven compensation structure. In Ontario, this could be a simple percentage approach, adjusting annually, or could be more complex. It could, for example, involve grandfathering existing net metering customers, but applying net billing to new DERs. (Although the latter risks reducing the momentum favouring DERs.)

- ***Add Express Storage Incentives.*** Other jurisdictions provide express incentives for BTM storage coupled with solar and other BTM generation, whether by way of capital assistance programs or capacity payments or otherwise. Customers like schools that today have rooftop solar are going to resist the capital costs and additional complications of adding storage – despite the substantial value that provides to the system – unless there are express incentives for that purpose. This is an example of incentives that are purpose-driven rather than value-driven. If we want DERs that deliver those resources when needed, then we need to help the hosts/owners overcome the initial barriers to get there.

- ***Opt-In Dynamic Pricing.*** Another way to incent the addition of storage to solar and other systems is to allow those customers to benefit from the volatility of real-time electricity values. This turns the shift from net metering to net billing into an opportunity rather than a reduction in compensation. At the beginning, smaller customers will not be in a position to use this efficiently, because they will not have the expertise. That will change, though, over time, as systems are developed (perhaps even add-ons to Green Button, although that is a more substantial step) that allow simple management of energy injections into the system. The system as a whole will benefit if small DERs with storage respond to real-time price signals by adding generation into the system at peak.

Distribution Rates for DERs

OEB Staff have asked a number of questions about how to deal with the disparate rates that apply to DERs, whether RTSRs, standby rates, or other charges.

SEC believes that the key issue here is distinguishing between forced standardization, on the one hand, and helping LDCs avoid re-inventing the wheel, on the other hand.

No-one benefits if every LDC in the province has to address as a fresh issue how to ensure that DERs pay their fair share in distribution costs. This is wasteful, and many LDCs do not have the staff to do it well. It just means a boon for consultants.

There is, SEC submits, considerable value in the OEB providing information and tools that will allow LDCs to make their own determinations on rates for DER situations. This could include not only information on best practices in standby rate design and application, but even models for how to implement those rates for certain types of customers.

This also could involve sharing with other LDCs the work done by some in cost allocation and rate design for specific situations.

Along the way, SEC would expect that the OEB could develop policies that would be applied whenever LDCs are implementing charges for DERs. By way of example, the OEB

may establish a policy that standby rates are a kind of contract rate that a customer requests, and can only be charged when they do so. Or, the OEB may establish a policy that certain LDC services are included in charges for load, and certain other services for DERs are incremental to normal load customer charges.

What SEC is not proposing is that the OEB establish standardized rates for DERs that apply to all LDCs. In our view, providing information and guidance is fundamentally different from requiring that LDCs charge $X for service Y.

In doing this, though, SEC strongly urges the OEB to draw a bright line between management of load (through energy efficiency, load management systems, energy use practices, or load displacement generstion), all of which in some senses are DERs, and DERs that interact with the distribution system.

So, for example, if a school board establishes a set of practices (which could be called "dynamic electric load-modifying technologies or practices") that control their load through real-time monitoring systems/controls, and/or through operating rules as simple as turning off lights or shifting computers to sleep mode, that should not be an activity that engages the distributor and attracts charges.

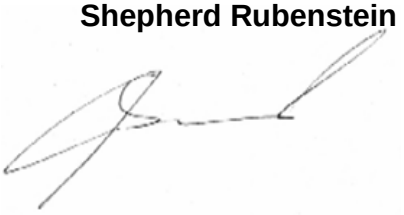
In our submission, it should be made clear to LDCs that how customers respond to the system's price signals by modifying their load as presented to the system is a matter for the customers to decide, and generally not a distributor cost for which customers pay a price to the LDC. This would be a useful kind of policy guidance for all LDCs.

Conclusion

SEC appreciates the opportunity to provide input on these important areas, and also that OEB Staff provided such a comprehensive analysis as a starting point.

All of which is respectfully submitted.

Yours very truly,
Shepherd Rubenstein Professional Corporation



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cc: Brian McKay, SEC (by email)
Interested Parties (by email)