

10 October 2024

Energy Storage Canada: Feedback on Non-RPP Class B Dynamic Pricing Options**(EB-2022-0079)**

Energy Storage Canada (ESC) welcomes this opportunity to provide comments on the Ontario Energy Board's (OEB) initiative on Dynamic Pricing Options for Non-RPP Class B Electricity Consumers (EB-2022-0079).

ESC is the national voice for the energy storage industry in Canada. Our membership represents over 100 companies across the energy storage value chain – technology providers, project developers, investors and operators, utilities, electricity distribution companies and NGOs, accounting for over 90,000 jobs throughout the country.

We recognise the Class B Dynamic Pricing initiative as a crucial step forward in the evolution of Ontario's energy sector, with the potential to optimise the efficiency of our power system, attract investment and deliver price stability for a wide range of economically important customer groups, and ultimately accelerate the transition to an abundant, reliable, net zero future.

ESC appreciates the thousands of hours invested in this initiative across all stakeholders since these efforts were first undertaken over six years ago. To that end, our strongest recommendation is for the provision of a clear and detailed timeline towards program implementation to ensure that participants are fully empowered to complete the final engagements of this policy development and implementation process, and thereafter to prepare for the sector-wide effort of deriving the maximum benefits from dynamic pricing. We believe that 1st of May 2026 is a reasonable and practical timeline for the first stage of implementation.

In the meantime, we maintain that the Critical Peak Pricing (CPP) model will deliver the greatest benefits for system efficiency, and therefore deliver the lowest costs to customers over the medium and long-term. Whatever model is ultimately adopted, we strongly encourage the OEB to ensure sufficiently strong peaks that would incentivize Class B customers to drive material investments into BTM assets, or other load management systems.

We also request the opportunity to be consulted on the forthcoming Report to the Minister, which we believe should include a clear recommendation for the OEB's preferred pricing model, as well as detailed considerations on implementation.

Please contact Justin Wahid Rangooni, Executive Director of ESC, for any questions or comments (jrangooni@energystoragecanada.org).

Background

The OEB's examination of alternative pricing for Non-RPP Class B consumers began with a staff research paper on pricing design options to recover Global Adjustment costs published in

February 2019.¹ This was followed by a stakeholder session on the research paper in March 2019.² Parties were invited to submit comments on the research paper by April 2019.

However, in June 2019, the OEB announced that stakeholder activities on many policy initiatives, including the examination of pricing design options to recover Global Adjustment from Non-RPP Class B Consumers, would defer further external stakeholder engagement activities during the OEB's transition to a new governance structure.³

Subsequently, the November 2021 mandate letter from the then Minister of Energy asked the OEB to work with the Independent Electricity System Operator (IESO) to develop a plan to design and implement a dynamic pricing pilot to assess the benefits for Non-RPP Class B customers.⁴ In July 2022, the OEB held a stakeholder meeting to discuss the development of a dynamic pricing pilot program for Non-RPP Class B consumers, inviting written comments by August 2022.⁵

Through the remainder of 2022 and into 2023 the OEB and IESO worked on developing a program to procure and manage a set of proponent-developed pricing pilot projects.⁶ However, in August 2023, the OEB announced that no draft nor final pilot project applications were submitted by the deadline.

In July 2024, the OEB announced that staff had undertaken a consultation-focused and research-based approach to identifying alternative optional price plans for Non-RPP Class B consumers, identified two alternative opt-in price plans, and held a stakeholder meeting in September to discuss the proposed optional price plans.⁷

At the September meeting, OEB staff presented the two price proposals:

1. Non-RPP Time-of-Use (TOU1): Fixed Global Adjustment (GA) price depending on the period of day, but does not vary by season.
2. Real-Time Price (RTP): Hourly GA price that correlates with Ontario demand.

OEB staff invited stakeholders to provide written feedback on its proposed price plans by October 10, 2024. The feedback will be used to inform a "Price Design Report" the OEB is

¹ <https://www.oeb.ca/sites/default/files/rpp-roadmap-staff-research-paper-20190228.pdf>

² <https://www.oeb.ca/sites/default/files/presentation-staff-research-paper-stakeholder-meeting-20190321.pdf>

³ <https://www.oeb.ca/sites/default/files/OEBltr-Stakeholders-Policy-Consultations-20190619.pdf>

⁴ <https://www.oeb.ca/sites/default/files/mandate-letter-from-the-Minister-of-Energy-20211115-en.pdf>

⁵ <https://www.oeb.ca/sites/default/files/Non-RPP-Class-B-Dynamic-Pricing-Pilot-Consultation-Materials-20220728.pdf>

⁶ See: <https://www.oeb.ca/sites/default/files/OEB%20Non-RPP%20Class%20B%20Pilot%20Program%20-%20%20Statement%20of%20Interest.docx>; and, <https://engagewithus.oeb.ca/29703/widgets/130671/documents/102267>

⁷ <https://www.rds.oeb.ca/CMWebDrawer/Record/859790/File/document>

preparing for the Ministry of Energy and Electrification on the proposed price plan(s) to be delivered in March 2025.

During the course of the stakeholder meeting OEB staff indicated that conducting price pilot projects were no longer being considered as part of the process of designing and selecting a price option.

Feedback on Proposals and Consultation Process

Proposed Price Options

ESC appreciates the extensive work the OEB has conducted to date on Non-RPP Class B pricing options. Previously the OEB presented a total of eight pricing options, including critical peak pricing (CPP) options. For example, the OEB's presentation stated that a TOU option Off:Mid:On ratio of 1:3:10 based on a Demand Based Hourly Price (DBHP) and RPP Pilots was also developed (TOU2), but not being proposed. The presentation states "TOU1 and RTP40 were chosen for further analysis and discussion with stakeholders since they best align consumer prices with system costs and have the potential to maximize long-term benefits."

ESC strongly disagrees with the options that have been presented for further consultation. **The removal of CPP as an option is a critical oversight.** As described by the IESO's current procurement processes [i.e., Medium Term 2 (MT2) and Long-Term 2 (LT2)], supply resources are procured for both energy and capacity services. Real-time energy prices (i.e., HOEP) are an appropriate representation of marginal energy costs but are influenced by external factors such as long-term contracts and rate-regulated revenue that maintains a different supply mix in Ontario beyond a purely academic energy-only market design. Resources contracted for energy represent a portion of GA (e.g., MT2 and LT2 energy contracts).

However, there is another portion of GA costs that are recovered to pay for assets and services that support adequate resource reserves in Ontario. The cost causality of resource reserves is directly linked to peak demand hours of which the CPP option more accurately reflects. ESC strongly recommends that the OEB include the CPP options into the Price Design Report and ensure the benefits (and costs) are appropriately discussed with, and understood by, customers and decision makers.

It is well documented based on experience in Ontario and elsewhere, that the differential between on-and off-peak prices is a key motivating factor driving customers to modify consumption behaviour or invest in behind-the-meter resources that enable load-shifting and optimization. For example, the OEB noted in its 2022 report to the Minister, *Design on an Optional Enhanced Time of Use Price*, that "In several pilot treatments (dynamic pricing, super-

peak pricing, critical peak pricing and overnight pricing), customer demand response increased the closer the ratio between the highest and lowest price was to 10:1.”⁸

ESC does not believe that a standard TOU design will provide sufficient motivation to customers to reduce consumption when it matters during peak periods. Moreover, CPP allows the grid operator to focus response of customers when peak-shifting is needed, rather than daily efforts that may have little or no benefit to the system. A CPP option is also more favourable relative to a real-time option since it makes participation in the pricing option more predictable for customers who may not have the capability to actively track market conditions.

If restricted to the two options presented by the OEB during the September webinar, ESC believes the Non-RPP TOU model represents the more effective and comprehensible option. However, ESC is of the view that the proposed TOU option Off:Mid:On ratio of 1:3:4 without seasonal variation is likely not large enough to incent cost effective conservation, load-shifting or other energy management solutions. Price signal and incentives require enough of a differential to drive consumer behaviour changes and investment action.

ESC believes that, in the interests of transparency and informed discussion on options and feedback, the OEB should provide stakeholders (as well as the Report to the Minister) with the information, criteria, analysis, and data used to conclude that certain price structures were found preferable to others as soon as possible (see feedback on Price Design Report below), and most of all, to reconsider the substantial benefits offered through the CPP option.

For example, the September deck states the OEB “Used AMI data to identify two pricing models with the greatest net benefit to consumers (i.e., bill savings) and the broader system.” However, the OEB deck only provided the estimated bill impacts for the two options presented (i.e., there was no data on other six options), and did not provide any data on impact on the “broader system.” Furthermore, the OEB bill impact analysis “*assumed no change in load profiles or behaviour.*”⁹

We respectfully challenge the presumption that it is possible to capture the benefits of Dynamic Pricing to either customers or the broader system if behaviour changes – the entire purpose of this initiative – are not considered within the analysis. This interpretation would be akin to dismissing the substantial value of the Industrial Conservation Initiative (ICI) solely by applying Class A consumption data prior to the implementation of the ICI program.

Objectives

OEB staff’s September deck set out three objectives for an opt-in price plan to achieve:

⁸ At 17: <https://www.oeb.ca/sites/default/files/Report-Design-of-an-Optional-Enhanced-Time-of-Use-Price-20220331.pdf>

⁹ <https://www.rds.oeb.ca/CMWebDrawer/Record/866139/File/document>

- Cost reflective: aligns consumers' prices with the costs that their electricity use imposes on the electricity system
- Minimize short-term disruption avoids significant bill impacts in the short term for non-RPP Class B consumers that do not choose an alternative price plan
- Feasible Implementation: is feasible to implement provincewide

ESC does not disagree with any of the three objectives presented by the OEB, but believes that only considering these objectives is inadequate for rigorously evaluating options and making recommendations. ESC notes that when the OEB and IESO were contemplating running non-RPP Class B pricing pilot, each organization had a set of objectives¹⁰:

The OEB's objectives were to evaluate price and price plans to:

- Support efficient electricity system operation and investment
- Provide non-RPP Class B consumers opportunities to reduce their electricity bills by shifting their usage

The IESO's objectives were to evaluate implications of different price plans on:

- Transmission system reliability
- Electricity demand
- Load flexibility, including CDM/DER measures
- Wholesale market efficiency

These previous objectives are not reflected in the OEB's current objectives, and it is not clear why the OEB's has concluded that the previous objectives no longer apply for designing and selecting a pricing option, or why the current objectives are preferable to those chosen earlier in this initiative. Further, it is not clear why the IESO's previous objectives are not included in the OEB's criteria for designing and selecting a price option. Further, it is no longer clear what role the IESO is playing in the price design and selection process (i.e., the OEB and IESO were explicitly working together on the pricing pilot, but that no longer appears to be the case).

Additionally, the ESC notes that the Canadian Manufacturers and Exporters' (CME), who represent many non-RPP Class B customers among their members, indicate in feedback on the OEB's non-RPP Class B Dynamic Pricing Pilot Program that one of the objectives, among others, of price plans should be to *"Evaluate how Class B rate programs may enable cost effective behind the meter (BTM) energy management solutions (e.g. HVAC and EV charging); BTM distributed energy generation and storage solutions (e.g. roof top solar and batteries); and the role of aggregators in optimizing outcomes."*¹¹

¹⁰ <https://www.oeb.ca/sites/default/files/Non-RPP-Class-B-Dynamic-Pricing-Pilot-Consultation-Materials-20220728.pdf>

¹¹ <https://www.rds.oeb.ca/CMWebDrawer/Record/754298/File/document>

ESC strongly believes CME's objective as well as previous OEB and IESO pilot objectives be considered as criteria for the OEB's evaluation of potential pricing options.

Implementation and Uptake

From the September webinar, it is apparent that the OEB's analysis of options was lacking details regarding implementation issues. ESC believes this indicates that OEB should work closely and iteratively with LDCs on future implementation (e.g., timing and costs) to ensure that the report to the Minister contains a comprehensive assessment of potential price options.

Moreover, and especially given that the OEB is no longer pursuing pricing pilots, ESC recommends that the OEB worked closely and iteratively with non-RPP Class B customers to test price options to ensure these customers, among other things, understand the pricing options(s), how it would impact their operations (costs and benefits), the incentives the option(s) provides for investing in BTM DERs, and whether there is adequate uptake interest in the any proposed price option(s).

For example, the OEB's September deck states *"Likely adopters are defined as consumers who would see 5% savings or more for annual bills over \$150,000, and annual savings equal to \$1,000 or more for annual bills less than or equal to \$150,000."* However, while the OEB refers to interview findings indicating that *"Most interviewees indicated that a small annual percent savings to their electricity bill could motivate them to opt into an alternative rate,"* it is not apparent what information the OEB relied upon to develop this definition, whether the interview sample was representative of the diverse range of Class B non-RPP customers, and/or whether interviewees were able to give well-informed responses. In fact, the OEB deck indicated that interview findings indicated that *"Most organizations are resource-constrained, lack dedicated energy analysis resources and require a bill calculator and other resources to support their decision-making processes."*

Price Design Report

ESC believes the OEB's Report should provide clear, specific and readily actionable recommendations on price option(s) to the Minister that the OEB, as Ontario's expert energy regulator, ultimately judges to meet the selected criteria and objectives.

Moreover, and again recognising the extensive work invested into this initiative across all market participants over the past 6 years, we strongly recommend that this report should include a clear and delineated timeline on the final policy development and implementation sequences for the introduction of Class B Dynamic Pricing in the Province of Ontario. We believe that the 1st of May, 2026 is a practical and desirable target date for implementation. This schedule would align with the implementation window adhered to for the successful implementation of the Ultra Low Overnight (ULO) rate in 2022/2023.

Including these details in the OEB's Report will be essential for encouraging the continued engagement of stakeholder groups in future consultations and other engagements. Crucially, a

clear timeline will be essential to enable LDCs to begin appropriate planning and early preparations for the substantial undertaking of introducing new rate structures. To that end, it may be appropriate to consider the possibility of a Two-Phase implementation process, whereby more technically equipped LDCs are able to proceed first, with their experiences informing and assisting a second phase of LDCs adopting implementation six months later, on 1st of November, 2026 – this two phased approach would again align with the recent ULO process.

Likewise, confirmation of an intended ‘start date’ will be crucial to begin attracting investments from Affiliates and third-party service providers that will enable Class B customers to take advantage of the new rate structures through adoption of DERs and load management systems. We must not dismiss the highly competitive global market for DERs and load management services, and the challenges of attracting robust investment into Ontario in the face of more advanced alternatives in other North American jurisdictions.

To that end, with a view to providing the best possible advice and specific pricing recommendations to the Minister, ESC believes that the OEB should provide stakeholders with an opportunity to comment on a draft Price Design Report. During the September webinar, OEB staff stated the stakeholders would not be provided with an opportunity to comment on a draft Price Design Report prior to delivering the Report to the Minister. The ESC disagrees with this approach and welcomes the opportunity to ensure further alignment on the report submission.

Further, ESC notes that after spending the previous two years on developing a pilot program (which did not receive any applications), that the September meeting signalled a significantly changed approach to developing pricing options, without the opportunity to field-test and evaluate the impact of pricing options. To that end, we strongly encourage the OEB to substitute these learnings by evaluating comparable applications from other jurisdictions that have introduced dynamic pricing for comparable customer groups.

The need for careful design has been recently highlighted in research on TOU and CPP pricing, noting *“Both time-of-use and critical peak pricing have some potential to improve economic efficiency in retail electricity markets. However, these efficiency gains must be balanced against consumer concerns of simplicity and predictability [...] If policymakers wish to improve efficiency in retail electricity markets, we recommend that they **focus on implementing a carefully designed critical peak pricing program and a simple time-of-use schedule.**”*¹²

ESC is keen to avoid any delay of the OEB Report to the Minister, and believes the goals articulated above can be accomplished while adhering to the planned delivery of the Report to the Minister in March 2025. For example, ESC recommends that the OEB provide stakeholders

¹² Arthur van Benthem, Andrew Hinchberger, Christopher Knittel, Mark Jacobsen, James Sallee, “How Can We Improve the Efficiency of Electricity Pricing Systems?,” Kleinman Center for Energy Policy, July 2024: <https://kleinmanenergy.upenn.edu/research/publications/how-can-we-improve-the-efficiency-of-electricity-pricing-systems/>

a draft report (or draft executive summary) in December 2025 with a 3-week window to provide feedback, leaving ample time for the OEB to take stakeholder comments into consideration and finalize the Report.

We would like to conclude by thanking the OEB for the extensive and diligent work on this important initiative. Our team is very excited to continue working with you on the final stretch of this undertaking, which we are confident will be an invaluable tool for improving the efficiency of our electricity system, attract investment from Class B customers towards improving their grid behaviour, enable market opportunities for Ontario's growing DER and load management service providers, and enable the transition to a clean, reliable, and abundant energy future for all ratepayers.