Feedback Form

Corporate Power Purchase Agreements (C-PPAs) Engagement – November 4, 2025

Feedback Provided by:

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Date: 2025-11-13

To promote transparency, feedback submitted will be posted on the <u>Corporate Power Purchase Agreements (C-PPAs) for ICI participants</u> engagement page unless otherwise requested by the sender.

- \square Yes there is confidential information, do not post
- $\square X$ No comfortable to publish to the IESO web page

Following the Corporate Power Purchase Agreement November 4, 2025, engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the items discussed. The presentation and recording can be accessed from the <u>Corporate Power Purchase Agreements (C-PPAs)</u> for ICI participants.

Note: The IESO will accept additional materials where it may be required to support your rationale provided below. When sending additional materials please indicate if they are confidential.

Please submit feedback to engagement@ieso.ca by November 18, 2025.



General Comments/Feedback

Northland Power Inc. ("Northland Power") is pleased to provide the following comments on the IESO's Corporate Power Purchase Agreement ("CPPA") engagement materials.

Eligibility of Storage Resources

Northland Power acknowledges that the IESO's engagement is focused on implementing Ontario Regulation 429/04. However, given the Ministry's intent to evolve the CPPA framework, the IESO's feedback will be instrumental in shaping future iterations. As such, Northland Power encourages the IESO to work with the Ministry to enable the participation of storage under the CPPA framework. In doing so, the IESO and Ministry would unlock a new pathway for new renewable generation and large loads to locate and invest in the province.

As global electricity consumers pursue decarbonization, CPPAs have emerged as a key mechanism for procuring clean energy, especially from wind and solar. In 2022, there were over 36 GW of CPPAs executed worldwide, a figure expected to rise significantly in coming years. In Canada, Alberta has positioned itself as an industry leader, making the necessary regulatory and market changes to facilitate the execution of over 3 GW of CPPAs to date. This proliferation of CPPAs has served to advance decarbonization goals, shift risk from ratepayers to individual large buyers and sellers, and spur economic growth through direct job creation in the sector, as well as by attracting new large loads. Alberta alone is estimated to have added 5,000 jobs as a result of CPPA activity.

CPPAs represent a massive opportunity for Ontario, but the above benefits will only be realised to the extent the CPPA framework results in the procurement of new clean electricity resources. A CPPA framework that does not allow for, or does not incent, the growth of new clean resources will fail to meet the needs of large loads, many of whom have decarbonization goals that require "additionality" (i.e. the CPPAs they execute must result in net new build). As enacted, the Ministry's regulation will not help achieve this goal, primarily due to the ineligibility of hybrid resources.

The Global Adjustment (GA) accounts for over half of the cost of consuming electricity in Ontario and serves as significant impediment to enticing new large loads. Large electricity consumers have limited options to manage GA costs. One approach is reducing their consumption during the five highest demand hours of the year; However, these high five hours are difficult to predict and thus necessitate reducing consumption during far greater than five hours on five days a year. These interruptions are costly to both the underlying business and the broader economy. Alternatively, large loads may install behind-the-meter (BTM) generation to offset their consumption during high five hours. These relatively smaller BTM solutions are typically more expensive relative to scalable transmission-connected generation and often include polluting diesel generators. Furthermore, loads often lack the expertise or space to own and operate BTM generation.

Theoretically, the Ministry's proposed amendments open a viable third option for loads to manage GA costs by entering into a CPPA with renewable generation located offsite. However, managing GA cost with offsite generation requires that generation to be controllable, consistently available to produce

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¹ According to BloombergNEF.

² According to According to Business Renewables Centre Canada.

³ *Ibid.*

electricity during the high five hours. On their own, wind and solar lack this feature, such that any generation from those resources during high five hours is purely coincidental.⁴ As such, the seller in a CPPA transaction can make no guarantees to the buyer that the generation will be available to offset consumption during those critical high five hours, making the buyer's GA avoidance highly uncertain.⁵ Consequently, buyers cannot offer sellers a fixed financeable revenue stream tied to predictable avoided GA costs. For sellers to credibly promise GA avoidance benefits such that buyers can compensate them for that value in a predictable and financeable way, the generation resource must be controllable.

Pairing wind and solar with storage in hybrid configurations makes these resources controllable, enabling them to deliver power during peak demand hours. This controllability is essential for reliable GA cost avoidance and for securing financeable revenue streams under CPPAs.

The Ministry has acknowledged that it has received significant interest in including hybrid resources as an eligible technology, but notes that the complexity to implement the regulation for additional technologies is a barrier. Northland Power believes any implementation complexity will be easily justified by the benefits new hybrid resources would bring to the grid and the broader economy, including as a means for shifting build costs from Ontario ratepayers to large loads and generators. Integrating hybrids into future iterations of the regulation should be a top priority.

Other Comments

- Generators require revenue certainty well in advance of the IESO's proposed timelines for approving CPPAs. To the extent a CPPA could underpin investment in a new build renewable project, that project would require some revenue certainty before construction begins, whereas the IESO will not approve a CPPA until that resource is constructed and registered as a market participant (closer to its commercial operation date). The IESO should explore granting conditional approvals several years in advance of the start of the CPPA term.
- Counterparties signing CPPAs of any length will face the risk that the regulation underpinning the Industrial Conservation Initiative and the allocation of GA costs will change, upending the economics of the CPPA. What protections can the IESO offer under these circumstances, or is that a risk to be negotiated between counterparties?
- The potential for one or both counterparties to fall out of compliance with the ongoing requirements of the CPPA framework introduces risk for both the buyer and seller. These requirements were imposed by the regulation/IESO, and may not represent what counterparties would have agreed to had there been a viable CPPA path outside of the regulated framework. In situations where one counterparty fails to meet the ongoing obligations, what are the rights of the IESO (termination?) as well as the other counterparty? What protections can the IESO offer under these circumstances, or is that a risk to be negotiated between the counterparties?

⁴ Looking back at historical renewable production during high five hours, the fleet-wide output from wind resources during a high five hour has been as low as 4% of installed capacity, and 16% for solar. In future, as the load profile flattens and high five hours begin to shift around, coincident renewable production (especially from solar) may be even lower.

⁵ When not operating to meet high five obligations, the storage component can provide additional operational flexibility to the grid.