

December 17, 2023

<u>APPrO Feedback to Proposed Amendments to Ontario Regulation 429/04 Related to the Treatment of</u> Corporate Power Purchase Agreements (ERO number 019-7853)

Overview

We thank the Ministry of Energy for the opportunity to provide this feedback to the proposed amendments to Ontario Regulation 429/04 related to the treatment of corporate power purchase agreements (the "**Proposal**").

The Association of Power Producers of Ontario (**APPrO**) is proud to have established itself as a leader in the industry, representing power producers across Ontario. Founded in 1986, our member companies build, own, and operate power projects across Canada, and produce most of Ontario's electricity from clean and renewable resources, including nuclear, hydroelectric, natural gas, biomass, wind, and solar energy.

APPrO focuses 100% on the business issues of power producers in Ontario, including:

- electricity generation and transmission development;
- energy planning, market design, operations and power procurement;
- federal and provincial climate change rules and compliance mechanisms; and
- other energy issues.

APPrO's goal is the achievement of an economically and environmentally sustainable electricity sector in Ontario that supports the business interests of electricity suppliers, ratepayers, and the provincial economy. We play a leadership role in the formation of energy policy and rules to facilitate investment in sustainable supply and efficient pricing of electricity in Ontario.

We believe that ambitious net-zero goals have the potential to transform Ontario's economy, and the way families and businesses use electricity. The costs of meeting targets will be significant, if not historic, and so it is critical that investment and regulation be directed toward productive technologies and outcomes that support the energy transition without unnecessarily constraining economic growth and innovation, or system reliability.

We understand the main objectives of the Proposal are to (i) support the growth of new clean generation and (ii) facilitate more power purchase agreements (**PPAs**) in Ontario.

In addition to promoting the development of new clean generation, APPrO understands that the Proposal is also aimed at incenting existing eligible generation resources to maintain operations after their respective IESO supply contracts expire over the next decade.

APPrO broadly supports the Proposal, and offers the following key recommendations to help ensure the Proposal meets the intended objectives:

- 1. the 10 MW cap on hydroelectric generation facilities be removed;
- 2. eligible renewable generation facilities be permitted to enter into multiple PPAs;
- 3. embedded facilities be included in the definition of "eligible renewable generation";
- 4. energy storage be expanded to include non-battery and standalone storage units; and
- 5. periodic review be performed on the scope of "eligible renewable generation".

Each of these recommendations are more fully described in turn, below.

The prescribed 10 MW cap on hydroelectric should be removed

We understand that one of the primary purposes of the Proposal is to incent existing clean electricity generation facilities to remain on the system after their current supply contracts with the IESO expire on a rolling basis beginning in 2026 through to 2035.

As the Ministry is aware, the IESO recently launched its Small Hydro Program with the intent to procure new contracts for existing hydroelectric facilities with installed capacities of 10MW and below. Thus a re-contracting mechanism already exists for small hydroelectric facilities, unlike for their larger >10 MW counterparts. The definition of eligible clean generation under the Proposal should therefore be expanded to capture hydroelectric generation facilities greater than 10MW that will also be coming off-contract before 2035.

Eligible renewable generation should be permitted to enter into multiple PPAs

The Proposal is unclear as to whether an eligible renewable generation facility would be permitted to enter into a PPA with more than one ICI program participant. In APPrO's view, multiple PPAs should be permitted to foster risk diversification and encourage cost-effective development of new clean electricity resources.

Allowing eligible generators to enter into multiple PPAs helps to mitigate the risk of any single defaulting off-taker, i.e. an ICI participant counterparty reducing or altogether eliminating its load requirements during the PPA term. Similarly, qualifying ICI participants may prefer to enter into PPAs with more than

¹ https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Small-Hydro-Program

one eligible generator to mitigate the risk of under delivery or default during the five highest demand qualifying hours of a base period. These types of risk mitigation measures help lower project development borrowing costs which in turn means lower prices making PPAs more attractive under the Proposal.

Further, allowing eligible generation facilities to build new clean resources and/or expand existing facilities to serve larger multiple load volumes encourages generation development in a way that leverages economies of scale and decreases per unit costs by negotiating better prices for raw materials, streamlining production and delivery processes. Lower per unit development costs for generators means, again, lower PPA prices for qualifying ICI participants.

Administering multiple PPAs for a single generator (or ICI program load) should be readily feasible as multiple physical bilateral contracts are already permitted under Chapter 8 of the IESO market rules so long as separate delivery points are attributable to each of the supplier(s) and the load(s)).

Embedded generation should be included in the definition of eligible clean generation

For similar reasons, embedded (distribution connected) generation should be included in the definition of eligible clean generation in the Proposal. Qualifying embedded generators (and loads) can register as market participants directly with the IESO for ICI participation purposes. This means that separate delivery points already have or can be assigned to embedded resources for IESO measurement and settlement purposes.

This approach is also consistent with the definition of "eligible cogeneration customer" under section 10.7 of the GA Regulation which includes Class A consumers.

Moreover, including clean embedded generation would better align the Proposal with the Minister's parallel priority to advance the development and implementation of distributed energy resources (DERs) as 'critical connectors in a clean energy economy'' (as stated in its recent November 29, 2023 letter of direction to the Ontario Energy Board).

Eligible energy storage should be expanded to include non-battery and standalone units

The Proposal currently includes battery storage as a form of eligible clean generation. APPrO understands, however, that there is some uncertainty as to whether the inclusion of battery storage will be maintained in the final version of the Proposal. In APPrO's view, not only should the definition of eligible clean generation in the Proposal continue to include battery storage, but should be expanded to include all forms of energy storage (e.g. pumped hydro, compressed air, flywheel, etc.) including standalone storage units.

Permitting all types of energy storage, as well as standalone storage units, to enter into PPAs under the Proposal is more consistent with and conducive to achieving broader provincial decarbonisation goals. Standalone storage units not only provide the flexibility required to help balance system needs during peak demand conditions, but also defer transmission and distribution system build out during a period when resources must be allocated toward upgrading the grid to support anticipated future demand growth including wide scale electric vehicle charging infrastructure and other electrification initiatives.

Moreover, it is imperative that non-dispatchable variable generation (wind, solar, etc.) are able to pair with storage – either as new build facilities or by way of upgrades, expansions or uprates to existing

facilities - in order to reliably deliver under their PPAs during the high five highest demand qualifying hours in a base period. In other words, without energy storage, the intermittent nature of variable generation sources makes it difficult, if not impossible, for a supplier to covenant under a PPA to supply during the five highest system peak hours, thereby making PPAs either unviable for off-takers or otherwise too expensive for generators who would be required to accept the delivery risk unless the IESO is prepared to act as a counterparty of last resort.

The current proposal would allow qualifying ICI participants to reduce their peak demand factors by offsetting their demand in the five highest demand hours of a base period with certain eligible renewable generation contracted under a PPA. However, there may be other ways to do this that reduce GA reduction volume risk. We would urge the government to consider such alternatives.

Periodic review should be performed on the scope of eligible renewable generation

Clean electricity generation technology innovation is occurring at an unprecedented rate as not only Ontario, but the globe, races toward meeting their decarbonisation goals by 2050. Rapid advancements in newer clean energy sources are ongoing (e.g. hydrogen, SMRs), while the evolution of even yet unknown renewable energy sources will undoubtedly arise in the coming decades. As such, it is important that the scope of eligible clean generation under the Proposal be revisited on a periodic basis to ensure that new viable clean energy generation sources are not unduly or inadvertently excluded.

It is equally imperative that the Proposal continues to be supportive of and consistent with the IESO's resource acquisition mechanisms (e.g. LT2, MT2, etc.) as recently announced in its <u>Resource Adequacy update dated December 11, 2023</u>, as the primary drivers for procuring reliable and affordable capacity and energy in Ontario.

Periodic regulatory review will also provide an opportunity for stakeholder feedback based on lessons learned and other observations regarding project development and grid interconnection challenges as well as alignment with regional planning. Regular consideration of the Proposal, together with endorsement of the ICI program generally, will give PPA counterparties assurance that their renewable energy investments will continue to deliver returns to the end of contract term as well as support overall uptake in the Proposal itself.

Finally, we recommend that the regulatory amendments be promulgated for stakeholder comment before coming into force. As it stands, it is not clear how feedback from the Regulatory Registry (RR) posting and other stakeholder consultations will be taken into account.

In closing, we applaud the Ministry's efforts.

Thank you again for the opportunity to provide this feedback on behalf of APPrO members. We look forward to continuing to work with Ministry staff toward the issuance of the Proposal in a form that best supports the growth of new clean generation and promotes a proliferation of PPAs in Ontario.