Mathew Peltier
Ministry of Energy and Electrification, Energy Supply Policy Division
7th floor, 77 Grenville Street
Toronto, ON
M7A 2C1

June 21, 2024

This submission responds to the Ministry of Energy and Electrification's (the "Ministry") request for feedback on amendments to O. Reg. 429/04 that would allow qualifying Industrial Conservation Initiative (ICI) market participants (Class A market participants) to offset their facility's demand during each hour of a base period for financial settlement purposes through power purchase agreements ("PPAs" with non-emitting generators not connected to the facility behind its meter (ERO number: 019-8666)[1]. The corporate PPA would be treated as if supplied to the ICI participant behind-the-meter for the purpose of determining Global Adjustment (GA) charges.

Power Advisory has coordinated this submission on behalf of a consortium of renewable generators, energy storage providers, and the Canadian Renewable Energy Association (CanREA) (the "Consortium"[2]).

We would like to thank the Ministry for its continued efforts to develop options, building on previous consultation (ERO number: 019-7853) for companies to actively manage/mitigate their energy supply needs and costs as well as provide businesses with more choice in how they pursue their environmental and sustainability goals. In particular, we appreciate that the Ministry included a draft of the regulatory amendments to inform stakeholder feedback on proposal more fully.

The Consortium views the revised proposal as a positive, incremental step in the development of a market for PPAs in Ontario. However, as currently drafted, is unlikely to result in significant uptake due to lack of clarity and restrictions on participation. At the same time, we acknowledge and understand the careful approach to amendments given Ontario's complex hybrid market structure.

This consultation will require a further draft of potential amendments to O. Reg. 429/04 that provide a complete and clear picture of how the Ministry intends the proposal to work so potential buyers and sellers can properly assess the risks and opportunities presented by the ICI-PPA opportunity.

Based on the information presented in the posting and draft regulation amendments we have the following comments on the proposal to allow Class A market participants to offset their facility's demand during each hour of a base period for financial settlement purposes through PPAs.

Overall Comments

The Consortium is concerned that, as currently drafted, the proposal is overly restrictive and unlikely to result in significant PPA uptake. In particular, limiting eligible loads and generators to IESO-market participants, not allowing hybrid energy storage-renewable generation facilities, requiring a copy of the

---

[1] https://ero.ontario.ca/notice/019-8666

[2] The members of the Consortium are: CanREA; Axium Infrastructure; BluEarth Renewables; Boralex; Capstone Infrastructure; CarbonFree Technology; Connor, Clark & Lunn; Cordelio Power; EDF Renewables; EDP Renewables; Enbridge; ENGIE; Evolugen (by Brookfield Renewable); FirstLight; Kruger Energy; Liberty Power; NextEra Energy Canada; Pattern Energy; Potentia Renewables, RES; and wpd Canada.

55 University Ave., Suite 700, P.O. Box 32 · Toronto, Ontario, M5J 2H7
416-303-8667 · jchee-aloy@poweradvisoryllc.com

PPA to be provided to the IESO, as well as potentially requirements for municipal support resolutions and land use restrictions will all act as disincentives for new generation facilities to participate.

Given Ontario's upcoming supply needs and increasing ESG requirements of loads, such as large multi-national companies seeking to build manufacturing facilities and/or data centres, the Consortium believes changes are needed to the proposal. The current restrictions will likely not achieve the Ministry's goals "to facilitate access to non-emitting electricity supplies for large customers and, as a result, provide businesses with more choice in how they pursue their environmental and sustainability goals. Greater customer access to clean electricity will create more competition in the renewable market that would help reduce overall generation costs and lower emissions."

The Consortium would welcome discussion with the Ministry on these proposed restrictions to better understand the reasoning behind them and to work together to develop alternatives that would better facilitate PPAs and new clean energy supply while addressing the Ministry's concerns.

Ministry questions

The posting indicated that the Ministry is interested in stakeholder feedback on the following three issues:

1. The mechanics of financial settlement (including peak demand factor calculations) under the proposed amendments.

   We believe that formulae in subsections 4.4 and 4.6 are clear and accurately reflect the contribution of the renewable generation to offset load during peak hours. However, we would appreciate knowing how the rules in subsections 4.5 and 4.7 will be applied and in particular what information in the eligible purchase agreements and other documents and information will be used. It seems to us that the energy delivered as measured at the revenue meters ought to suffice for the purposes of calculating V.2 and V.3.

2. The implementation of a proposed requirement that new generation facilities obtain a local municipal support resolution stating support for the new generation facility on their municipal lands in order to be eligible under the proposed amendments.

   The requirement for a new generation facility to obtain a local municipal support resolution is a requirement under IESO's long-term request for proposals framework, seeking to procure significant amounts of capacity and/or energy, generally involving large scale projects. The Consortium believes that in the case of a PPA issues such as community support and engagement and the potential risks associated with them are best managed by the parties to the agreement and should not be an eligibility requirement.

3. A potential restriction on locating new generation facilities on prime agricultural lands.

   The Consortium would appreciate no such restrictions. Renewable resources need to be located where there is a resource.

Detailed Comments

In addition to feedback on the issues identified by the Ministry, the Consortium has comments on various other aspects of the proposal.

1. Market participants

The posting refers to "Class A market participant" and the draft regulation's definition of an "eligible purchase customer" refers to a "Class A market participant." However, there are no references to "Class A Consumer" (not a market participant) being eligible. Customers participating in the ICI can be IESO market participants or LDC consumers. The posting does not make any reference to, or explanation for, excluding ICI participants that are not IESO market participants from participation in the PPA proposal.

Further, the draft regulations define an "eligible generator" as a generator that is a market participant.

O. Reg. 429/04 is made under the Electricity Act, 1998, which defines a "market participant" as "a person who is authorized by the market rules to participate in the IESO-administered markets or to cause or permit electricity to be conveyed into, through or out of the IESO-controlled grid."

Limiting the eligibility to market participants significantly reduces the potential number of "eligible purchase customers" and "eligible generators" for PPAs.

The Consortium understands that the Ministry is concerned about the shifting of GA costs from Class A to Class B customers. However, the result of limiting PPAs to Class A market participants means Class A non-market participants (LDC consumers) would be unable to offset their demand via a PPA during peak hours. As a result, Class A non-market participants would see their share of GA costs increase as a result of Class A IESO market participants reducing their peak demand through a PPA.

The Consortium believes all interested stakeholders would benefit from a clear explanation of the reasons for limiting eligibility to IESO market participants.

2. Hybrid Facilities

The Ministry's posting states that the non-emitting resources eligible under the proposal are wind, solar, hydroelectric and biofuel (i.e., renewable sources). The proposal notes that there is "interest in pairing these technologies with energy storage and the inclusion of nuclear small modular reactors (SMRs), however due to the complexity to implement these additional technologies they will be considered at a future date."

The Consortium would appreciate an explanation of the "complexity" associated with including energy storage in the proposal.

Making hybrid storage-renewable generation facilities eligible would offer ICI participants an alternative to shutting down their production facilities to avoid the top five peak hours while allowing participants to manage the intermittent output of renewable generation and fully contract-out energy systems.

In addition, pairing energy storage with renewables may improve project economics for renewable generation facility developers. For example, supporting hybrid facilities would encourage new non-emitting resources to be capable of offer more services to corporate PPA holders as well as the IESO-Administered Markets (IAM) through enhanced dispatch capabilities compared to stand alone intermittent renewable generation.

The Consortium believes the Ministry should reconsider the decision to exclude storage. If the Ministry is concerned facilities being primarily storage resources rather than renewable generation, we suggest that the Ministry impose a cap on the amount of storage relative to generation. For example, the Ministry could require that an eligible generation facility have storage capacity of no more than 60 percent of the nameplate capacity of the facility's renewable generation resource.

3. Eligible generator

The definition of an "eligible generator" in the draft regulation states that it "does not include a generator that consumes more electricity than it generates."

It is not clear what specific type of generation is intended by this statement. The Consortium would welcome clarification on this issue.

4. Eligible purchase agreement

The draft regulatory amendment section 10.9(2)(d)(i) states to be an eligible purchase agreement the agreement has to provide for the purchase of "a total of at least one megawatt-hour [MWh] of eligible electricity during each hour in the base period." The Consortium finds this requirement unclear as it appears to suggest that the renewable energy facility must have the capability to inject 1 MWh of electricity at any time, which is not possible for a standalone wind or solar facility. Further, even a grouping of wind and solar generation may present hours where the combined output is above zero but less than 1 MWh where wind fades or solar energy ramps down at the end of the solar day. Is it intended that the contract could not convey that partial MWh amount where it arises?

5. Provision of Attestations and Purchase Agreement

The draft regulations states that the IESO must be provided with:

1. A letter from the market participant and the eligible generator,

   i. attesting to and confirming that they have entered into one or more eligible purchase agreements with each other in respect of the Class A load facility or facilities referred to in subsection (1) that are to be in force throughout the applicable base period, and

   ii. attesting to, specifying and confirming the proportion, expressed as a percentage, of the total volume of electricity supplied by the generation facility or facilities referred to in clause (2) (c) into the IESO-controlled grid or the distribution system of a licensed distributor over the applicable base period that is to be purchased by the market participant under each of the agreements.

2. A copy of the eligible purchase agreement.

It is not clear to the Consortium why the IESO must provide with both an attestation and a copy of the PPA. The Consortium notes that the PPA could have terms and/or be part of a larger energy services agreement between the market participant and the eligible generator, containing commercially sensitive information the parties do not want to be disclosed to competitors.

As an alternative, the Consortium recommends that the regulation require the parties provide attestation for any specific contract requirements deemed necessary by the IESO.

6. Market Renewal Program

The effective date for the proposed amendments is May 1, 2025, which is also the "go-live" date for the IESO's Market Renewal Program (MRP). MRP will replace Ontario's current uniform pricing market with Locational Marginal Prices (LMP) that will apply for loads that are market participants (e.g., Class A market participants).

In specific circumstances, LMP differentials can help support project economics through benefits for both the customer and generator depending on technology type and connection location as well as offering broader system benefits.

However, the PPA proposal does not discuss or refer to MRP, LMP, or how the change from Ontario's current uniform market price to LMP will impact (and/or be compatible with) the ICI given the supply/demand signals of the two regimes do not align (e.g., the top 5 peak hours and share of GA costs in the ICI program are based on total Ontario system peaks, not locational circumstances under which LMPs are determined).

The Consortium believes that the Ministry's proposed changes to ICI, with an effective date that coincides with MRP go-live, require to the Ministry to clarify what, if any, changes are contemplating regarding the ICI program and how GA will be allocated with the implementation of LMP. For example, will GA continue to be applied uniformly across Class A customers, or will GA vary by location like LMPs? Will GA vary across Class A customers, depending on if they are market participants or LDC customers post-MRP?

Class A market participants and generators will need clarity and certainty on these items in order to properly evaluate project economics and commercial terms of potential PPAs.

We will be pleased to meet with the Ministry about this submission at a mutually convenient time to discuss options to improve the proposal to better achieve and facilitate the Ministry's aims.

Sincerely,

Jason Chee-Aloy
Managing Director
Power Advisory

cc:
Elio Gatto (Axium Infrastructure)
Roslyn McMann (BluEarth Renewables)
Adam Rosso (Boralex)
Stephen Cookson (RES)
David Oxtoby (CarbonFree Technology)
Patrick Leitch (Capstone Infrastructure)
Jason Woods (Connor, Clark & Lunn)
Paul Rapp (Cordelio Power)
David Thornton (EDF Renewables)
Nathan Roscoe (EDP Renewables)
Lenin Vadlamudi (Enbridge)
Michelle Dueitt (ENGIE)
Julien Wu (Evolugen by Brookfield Renewable)
Stephen Somerville (FirstLight)

55 University Ave., Suite 700, P.O. Box 32 · Toronto, Ontario, M5J 2H7
416-303-8667 · jchee-aloy@poweradvisoryllc.com

JJ Davis (Kruger Energy)
Deborah Langelaan (Liberty Power)
Michelle Gardner (NextEra Energy)
Rob Campbell (Pattern Energy)
Jennfier Tuck (Potentia Renewables)
Ian MacRae (wpd Canada)