

May 5, 2022

Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON
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Via email to engagement@ieso.ca

Re: Clean Energy Credits Registry

The Power Workers' Union ("PWU") represents a large portion of the employees working in Ontario's electricity industry. Attached please find a list of PWU employers. The PWU is a strong supporter and advocate for the prudent and rational reform of Ontario's electricity sector and recognizes the importance of low-cost, low-carbon energy to the competitiveness of Ontario's economic sectors.

The PWU appreciates the opportunity to provide input on the IESO's development of a clean energy credit registry as requested by the government. The PWU believes that a well-designed clean energy credit registry that is synergistic with the emissions performance standard in the province can help deliver low-carbon energy to reduce the provinces emissions at the lowest reasonable cost while stimulating job creation and growing the province's gross domestic product (GDP). We are respectfully submitting our detailed observations and recommendations.

We hope you will find the PWU's comments useful.

Yours very truly,

Jeff Parnell
President

Power Workers' Union Submission on the IESO's Clean Energy Credits Engagement

May 5, 2022

On April 25, the IESO presented considerations for designing the Clean Energy Credit (CEC) Registry and the administration of clean energy credits. The IESO summarized stakeholder feedback and customer survey results, outlined the potential basic features and functionality of the CEC registry and, most critically, outlined options for how a CEC product might be defined and managed with respect to the Environmental Attributes (EAs) of Ontario's clean energy supplies (specifically greenhouse gas (GHG) emissions).

The PWU's feedback is focused on the latter and three factors posited by the IESO:

- 1) The options did not address the government's three primary objectives, in particular, returning proceeds to ratepayers;
- 2) The IESO believes that owning and selling CECs would place it in a conflict of interest; and,
- 3) The IESO notes that the hourly tracking of clean electricity required by the CEC Registry exceeds its capabilities at this time.

These three factors result in the IESO having presented no viable options for fully achieving the government's objectives. In March, the PWU provided several recommendations, in response to the IESO's previous request for feedback, that addressed these issues and presented a credible path forward.¹ The IESO has not responded to the PWU's recommendations and most importantly has not addressed the PWU identified need to segregate credits associated with existing generation for the Environmental, Social, and Governance (ESG) objectives from those for new, non-emitting generation that would comply with the Emission Performance Standard (EPS) objectives. The PWU stresses the validity of its previous advice and offers these additional recommendations:

- 1) The options should be assessed against the extent to which they achieve the government's three objectives and recognize the two natural distinctions for credits for existing versus new assets;
- 2) The IESO should assume ratepayers own the environmental attributes (EAs) for all contracted and regulated assets to ensure all of the government's objectives are achieved;
- 3) The alternatives to the presumption of ratepayer ownership are complex and warrant detailed business analysis to confirm both their viability and compliance with the government's objectives;
- 4) Credits should be validated against hourly energy use to ensure that these CECs address emissions from the electricity system;
- 5) Use of CECs to achieve government objectives can be effectively enhanced by imposing the full carbon price on all electricity generation supplied to the grid; and,
- 6) Developing a price setting formula based on a premium for the actual emission reduction achieved by clean generation and funding the management of the CEC registry outside of the electricity system could help future-proof the system.

¹ PWU submission to the IESO on Clean Energy Credits Registry, March 17, 2022.

Recommendation #1 - The options should be assessed against the extent to which they achieve the government's three objectives and recognize the two natural distinctions for credits for existing versus new assets;

The government has three CEC objectives: reduce Ontario's total GHG emissions; flow CEC revenue proceeds to ratepayers; and, help businesses attract jobs and investment by meeting their environmental goals.² The PWU notes that the IESO's material states that the "Primary goal of CEC offerings is to enable economic development by introducing a tool to help companies meet their clean energy goals" while making no mention of the government's other two objectives.

Achieving the first goal to reduce GHG emissions is limited as it relies on procuring new, non-emitting resources. Proposed CECs associated with existing generation EAs, on the other hand, simply allow purchasing organizations to claim the use of Ontario's existing clean electricity within their self determined ESG targets, with the government objective that a premium is paid to rate payers for the privilege. This is an important distinction since CECs from existing generation only help two government objectives: purchasing organizations achieving their ESG goals and flowing proceeds to ratepayers. These latter two government objectives and the first goal, to reduce emissions, should all be addressed by CECs for new generation. Credits associated with new generation should be eligible for use as compliance instruments under Ontario's EPS as well.³

This distinction is unclear in the IESO's presented assessment and the IESO should examine these distinct challenges and recognize that additional solutions may be warranted.

Recommendation #2 - The IESO should assume ratepayers own the EAs for all contracted and regulated assets to ensure all of the government's objectives are achieved.

The IESO presented three options for existing assets (Options 1a to 1c). In all three cases, the IESO dispenses CECs for which it assumes ownership of associated EAs and does so in an unbundled manner, either freely or for an as yet to be determined value. For Option 1b, the IESO sells the CEC and the proceeds are returned to ratepayers. While this is the PWU's preferred option, the IESO discounts it based on some perceived conflict of interest.

For options related to new assets, the IESO proposed an Option 2 to incorporate EA considerations in the IESO's future procurements, and two other options that respond to customer requests for bundled products.⁴ The IESO has discounted Option 2, based on its position that the IESO will not own the EAs from newly procured generation. The PWU, however, believes that this is the most viable option for achieving the government's objectives and has the further advantage of complementing and mirroring the potential Option 1b implementation.

² Ministry of Energy letter to the IESO, January 26, 2022.

³ PWU submission to the IESO on Clean Energy Credits Registry, March 17, 2022.

⁴ The Option 3 examples included a form of private PPAs and a Green Pricing Program. The PWU agrees with the IESO that the Green Pricing Program is too complex to be considered, undermines the IESO's own procurement mandate and provides no benefit to ratepayers. The PWU acknowledges that the PPAs could provide benefits and not result in cost shifting or additional unintended discounts on a customer's use of grid services.

The PWU recommends that the IESO and government address these concerns as the IESO's management of the sale and proceeds from the CEC registry activity can maximize potential benefits associated with the government's stated objectives and minimize the cost.

- a) The IESO and the government should deem that ratepayers already "own" all existing EAs and will "own" all future EAs.
 - i. Ontario ratepayers are paying the full cost of all generation now and will in the future. EAs were not previously valued and therefore no discount has been provided to ratepayers. This is true for all IESO and Ontario Electricity Financial Corporation (OEF) contracted assets, as well as for OEB regulated assets. Any value that CECs may offer for these fully paid assets should accrue to ratepayers. The objective of the CEC registry did not include objectives to increase returns to generators, only to ratepayers.
 - ii. Future IESO procurements do not currently consider EAs. The IESO is initiating 6000 MW of procurement this year. Without including EAs, ratepayers will be paying the full cost of these assets too.
 - iii. The IESO should not be signaling that it has no "ownership" of the EAs simply on the basis that it is procuring capacity, not energy. It would otherwise have to be clearly and transparently established that ratepayers will receive a discount in the energy market for the EAs equivalent to the value they have paid. This can be expected to be an unlikely outcome.
- b) The IESO is not in a conflict of interest, if it is the organization selling the clean energy credits on behalf of ratepayers.
 - i. The EAs are not the IESO's. The IESO would be acting as an agent for ratepayers;
 - ii. Any conflict-of-interest concerns could be addressed by ensuring appropriate IESO administrative practices supplemented by OEB oversight if deemed necessary; and,
 - iii. Conflicts could also be resolved by developing price-setting guidance for the sale of the CECs (see recommendation #6).
- c) The IESO is the source for information on generation output and is best able to characterise the useable output from all of Ontario's eligible, clean energy resources and is best positioned to provide an objective source for CEC validation.
- d) The IESO manages the Global Adjustment cost elements and hence has a convenient mechanism for flowing the proceeds to ratepayers as prioritized by the government.
- e) The IESO owns the bulk procurement process for new energy and these will continue to be the primary assets eligible for CEC participation. The IESO controls what is, and is not included, in its procurements.⁵ To waive EA ownership, the public should be convinced that an appropriate discounted value is captured by the procurement practices. There are no evident mechanisms for providing this assurance.

The IESO is best positioned to guarantee the traceability and integrity of the CEC system in reducing emissions and transferring proceeds to ratepayers, two of the government's primary objectives. By addressing these considerations, the IESO could have a relatively simple, deterministic, and unbundled approach to both ESG related CECs from existing generation assets and compliance CECs from new

⁵ Behind the meter generation, largely net metering applications, should not be eligible as Net Metering is already a generous program for high cost assets. New distributed energy resources not involved in net metering, the Industrial Conservation Initiative or time of use rate arbitrage could be deemed eligible.

generation that will also reduce emissions. Such approaches can be confidently implemented as soon as the CEC registry infrastructure is appropriately developed.

Recommendation #3 - The alternatives to the presumption of ratepayer ownership are complex and warrant detailed business analysis to confirm both their viability and compliance with the government's objectives.

The IESO's expressed reticence to managing existing and future EAs leaves the process and achievement of government objectives up to "markets" and outside of public influence. Such an approach has no clear mechanism for ensuring that ratepayers benefit at all. The benefits for ratepayers should be transparent, i.e., an energy price discount from the CECs for clean energy acquired on their behalf. This will be challenging in the absence of a mechanism by which the CEC proceeds are shown to impact the IESO's capacity procurement costs or the clearing price in the energy market. Without such a mechanism there will be no assurances that the CEC will benefit ratepayers, incent investment in clean electricity supply or provide an economic valuation of the CECs for ESG or EPS compliance purposes. Additionally, this would require a "market" with financial clearing that is not currently a proposed function of the registry.

To address these risks, detailed business assessments should be conducted to establish the realistic policy outcomes that may arise from an alternative to the regulated and legislated approach described in Recommendation #2 above. No decisions should be made in favour of these alternatives until the detailed business analysis is completed of the risks, possible outcomes, and benefits. Qualitative arguments are insufficient. The risks that the CEC process will merely contribute to profiteering and greenwashing are very high.

Recommendation #4 - Credits should be validated against hourly energy use to ensure that these CECs address emissions from the electricity system.

The PWU is disconcerted that the IESO has stated its inability to track hourly energy use against the CECs. Without tying CECs to actual energy consumption on an hourly basis, the validity of the use of those CECs for either ESG or compliance purposes is undermined. Creation of credits for sale does not need to be associated with specific hours and should have a life of one year, possibly with a grace period. The retirement of the CEC should underpin the claimed benefits.

Unlike the emissions credits deployed under the Emissions Performance Standard (EPS), electricity is a perishable product and is time dependent. For example, for an organization to purchase a number of solar CECs to validate its claimed clean energy use, it is important to demonstrate that the solar energy associated with the credit is credibly used by that consumer coincident with when the energy is produced. Absent this direct validation, the process will devolve into a greenwashing exercise that provides no real value to reducing emissions. Even worse, when a CEC holder benefits from claims under its ESG, the consequence of the residual supply mix impact places an unjustified penalty on other consumers, who will lose part of their ability to claim the benefits of Ontario's clean electricity system when their traceable consumption is no different.

Only the IESO is capable of identifying when clean energy by type is actually input to the system and it remains unclear why the IESO believes it is incapable of hourly tracing. The CEC should not proceed until the IESO can track CEC retirements against the associated specific hourly usage of the clean electricity. It is only in the actual use of the clean energy from new resources that would enable credit interchangeability with the EPS.

Recommendation #5 - Use of CECs to achieve government objectives can be effectively enhanced by imposing the full carbon price on all electricity generation supplied to the grid.

Emission reduction in the electricity sector would be best achieved by ensuring that the full carbon price is applied to all emitting generation. This would set the firm economic signal that investors would rely upon to initiate development of non-emitting options.⁶ The CECs could then be applied to help reduce the cost to ratepayers of the new clean energy that displaces emitting supplies.

Concerns have been expressed that the application of a carbon price to the electricity sector could drive up consumer electricity costs. This could be mitigated by rebating the carbon price proceeds to customers. This would remove the consumer burden while retaining the force of the carbon price incentive on investment and strengthening the incentive for participants to purchase CECs.

Recommendation #6 - Developing a price setting formula based on a premium for the actual emission reduction achieved by clean generation and funding the management of the CEC registry outside of the electricity system could help future-proof the system.

CECs will be a popular option for consumers if they are less expensive than the cost of emissions under the EPS. At the same time, ratepayers must be treated fairly so that they are not subsidizing the users of the CECs. A pricing formula should be developed for the IESO's initial issuance of the CECs to: support a simple implementation; mitigate conflict of interest concerns; and facilitate regulatory oversight. To fairly capture ratepayer value, such a pricing mechanism should:

- Given the negligible capacity value of intermittent, non-dispatchable resources, the price of a CEC should reflect the difference between the \$/MWh cost of energy used by the grid and the variable cost of gas-fired generation (i.e. the Hourly Ontario Energy Price when gas-fired generation is present, excluding any effects of a carbon price); and,
- For clean, dispatchable baseload resources, the CEC price should reflect the difference between the overall annualized \$/MWh cost of the generation compared to the sum of the variable cost of gas-fired generation and an allocated fixed cost per MWh of the gas-fired capacity based on an equivalent operating factor (e.g. 85%).⁷

A clearly defined price formula could also mitigate any demand/supply imbalances that undermine post issuance market pricing should they emerge. Only CECs purchased at the base price by customers would be publicly available and it will set a fair floor price for ratepayers.

⁶ The IESO should consider this as a criterion in its current procurement.

⁷ Typical annualized figures could be used for all parameters and be updated on an annual basis.

Estimating the supply/demand balance could help size the initial issuance to provide further after market risk mitigation.

Class A consumers, who represent only about 10% of demand, may be the only interested parties in claiming better than grid emission performance for ESG purposes. Creating CECs to offset the associated ~10% of gas-fired generation that could potentially be allocated to them may be all that is required. If 10% of Ontario's generation is gas-fired, CECs equivalent to a maximum of ~1% of total generation would need to be issued. Releasing half of this amount, may be an appropriate benchmark to help assess the financial impacts (e.g. if 0.5% of Ontario's 150 TWh of demand is 0.75 TWh and CECs are valued at ~\$20/MWh, this would equate to \$15M/year, a modest amount of potential revenue). The IESO should work with government to ensure that the costs of these broad CEC registry policy objectives do not burden ratepayers and reduce this value.

Closing

The PWU believes that a CEC registry should benefit Ontario's electricity system and ratepayers if managed in a manner that ensures emissions criteria are included in the IESO's procurement considerations, the value of CECs is captured for ratepayers and potentially applied to offset IESO investments in new generation to benefit ratepayers.

The PWU has a successful track record working with others in collaborative partnerships. We look forward to continuing to work with the IESO and other energy stakeholders to strengthen and modernize Ontario's electricity system. The PWU is committed to the following principles: Create opportunities for sustainable, high-pay, high-skill jobs; ensure reliable, affordable, environmentally responsible electricity; build economic growth for Ontario's communities; and, promote intelligent reform of Ontario's energy policy.

We believe these recommendations are consistent with, and supportive of Ontario's objectives to supply low-cost and reliable electricity for all Ontarians. The PWU looks forward to discussing these comments in greater detail with the IESO and participating in the ongoing stakeholder engagements.