Enbridge's Feedback on the Development of a Clean Energy Credit Registry

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Life takes energy, and Enbridge exists to fuel people's quality of life. For more information, visit www.enbridge.com*.*

Introduction

Enbridge appreciates the opportunity to comment on the Ministry of Energy's (MOE) proposal for the Development of a Clean Energy Credit (CEC) Registry.

Enbridge supports the MOE's efforts to establish a CEC Registry as it will improve the economics of developing clean energy projects, help power consumers meet their emissions reduction goals, and reduce electricity costs and grid emissions for ratepayers in Ontario.

However, the CEC Registry and any related market can best provide the above benefits if they adhere to principles that are becoming staples of other thriving Environmental Attribute (EA) programs. Namely:

1. **Avoid double-counting:** Each CEC must be tied to a unit of energy (MWh) with a unique identifier only once to be useful under voluntary emission reduction targets or potential future compliance programs. Such tying means that the Independent Electricity System Operator (IESO) will have to establish a grid emissions intensity factor for the residual electricity supply mix that excludes any clean electricity tied to a CEC that has been sold to a third party other than the IESO. Establishing a grid emissions intensity factor is necessary to ensure for the CEC buyer that the CEC is valid and for the IESO to understand the true emissions profile of its supply mix to inform future planning and procurement decisions.

2. **Additionality:** CECs should be verified as being tied to emissions reductions that would not otherwise have happened, such as being tied to new power generation. CECs should be created from incremental generation tied to new and repowered projects for at least 20 years from the Commercial Operation Date (COD) and/or from the generation of uprated or expanded facilities for the portion of the generation tied to the update or expansion.

   For greater clarity, this means that the existing generation, from which the IESO has already claimed the EAs, should not be eligible to generate new CECs, and the IESO would not be eligible to sell the EAs it is receiving from the existing generation. Ontario ratepayers – including large power consumers – have made investment decisions based on the expectation that the IESO would retain the EAs it receives from generators, which keeps the grid emissions factor low and has made investment in Ontario favourable to higher-emitting regions to the south. Allowing the selling of CECs from existing generation could put significant strain on emissions reporting and compliance for all power consumers in Ontario that do not purchase CECs. For example, with the expectation that the calculation of the residual carbon intensity of Ontario's electricity grid would exclude MWhs tied to retired CECs, the residual carbon intensity of the grid would be expected to be unpredictable and fluctuate annually depending on the uptake of CECs within a given year if CECs are sold from existing generation. This will also make emissions reporting unpredictable and variable year-to-year for power consumers who decide not to purchase CECs. If the CEC Registry is only available to additional resources, as described above, it will provide much better forecasting and visibility into likely grid intensities for ratepayers.

3. **Interoperability:** Due to existing hydro, nuclear, and renewable energy sources, Ontario's grid has a low-emissions intensity grid compared to nearby jurisdictions. As a result, demand for the CECs may be limited within Ontario. The MOE's CEC program should be interoperable with successful EA programs in neighbouring jurisdictions to maximize the benefits to generators and ratepayers. We understand that the MOE may consider expanding beyond purchase and retirement within Ontario in the future, but the MOE should work to future-proof the system as much as possible in its design. We also recommend that the MOE consult with the Federal Government on its proposed Clean

Electricity Regulation (CER) design, as any CEC framework should be interoperable with a federal program and/or the requirements for a provincial backstop in the future.

4. **Fairness in determining eligibility:** We appreciate that the MOE has attempted to be expansive in its inclusion as to what might generate a CEC under the Registry, but the Registry should also include other non-emitting energy sources. For example,

   - A gas plant fired by renewable natural gas (RNG), or potentially hydrogen, should be able to generate CECs, at least for the MWhs that can be verified as tied to RNG or hydrogen as opposed to natural gas as the fuel source. Consideration should also be given to instances where the hydrogen is sourced from third parties and can be verified that the CEC has not been used elsewhere to prevent double counting. Including sources of energy, such as RNG and hydrogen, is consistent with the inclusion of landfill gas.

   - There is no functional difference between Behind the Meter (BTM) or front of the meter (FTM) when producing a MWh of clean energy and/or that electricity's contribution to voluntary emission reduction targets. Therefore, BTM generation should be equally eligible to generate CECs, whether small rooftop solar on a residential structure or larger, utility-scale BTM production. CECs are an important part of project finance in most markets and are the measure of clean energy produced, and both methods of production should be treated equitably in the CEC Registry.

   - Turboexpanders on a natural gas system create electricity by using the energy released during a pressure reduction within the natural gas distribution system to spin a turbine, which can be used to produce electricity. The electricity produced using a turboexpander is non-emitting, takes advantage of only differences in the gas pressures, and should be eligible to generate and register CECs.

5. **Ongoing consultation:** There are many open-ended technical components of the CEC framework at this time. The MOE has proposed a few technical details, which make providing detailed feedback challenging. Ongoing consultation will be required on details such as the lifetime of a CEC, how long a project can produce CECs after the start of commercial operation, how the IESO will manage the residential supply grid emissions factor and grid supply planning process, etc. Enbridge appreciates the opportunity to provide comments under this consultation, and we look forward to future participation in the design of this CEC framework.

We comment on the MOE's specific proposals below.

Comments on Proposal

Ontario Context – Initial Registry Design

Per the minister's letter to the IESO, the registry would initially be designed to:

- *Be scoped to Ontario – that is, CECs must be generated and consumed in Ontario;*
- *Allow for voluntary CEC purchases – no person or entity would be required to purchase CECs;*
- *Emphasize customer choice – offer CECs from all non-emitting fuel sources from facilities in different areas of the province;*
- *Monetize investments made in Ontario – CEC offerings should include those from existing non-emitting generation; and*

- *Be future-proof – built to offer flexibility and the potential for future expansion to other products or markets.*

Furthermore, the minister's letter indicated that the IESO should consider how to enable the launch of a registry by January 2023.

Enbridge supports the MOE's proposal that no person or entity would be required to purchase CECs, and its intent to offer CECs from "all non-emitting fuel sources." The MOE should include in its definition of "non-emitting fuel sources" MWhs produced from RNG, hydrogen, turboexpanders, and BTM and FTM wind and solar. Such inclusion enables true market competition and buyer flexibility in meeting their emission reduction goals in the manner that best suits their particular operations and power requirements.

We also appreciate that the MOE intends to make the CEC Registry future-proof to ensure that it can expand to be interoperable with other markets and jurisdictions. However, much of the CEC demand will likely come from neighbouring jurisdictions, particularly with implementing the Federal CER, and this interoperability will be critical to the Ontario Registry's success. Enbridge understands that the MOE aims to have this Registry established by the start of the New Year. However, the Province should take the necessary time to consult with the Federal Government, other provinces, and neighbouring jurisdictions in the United States, as well as a variety of stakeholders in Ontario, on the details and regulatory and legislative changes to ensure that decisions made now actually do future-proof the CEC Registry. It would create significant economic uncertainty if the rules and regulations needed to be substantially altered once the CER and other pending regulations are resolved.

Enbridge does not agree that the existing generation should be able to produce CECs or that the IESO should be permitted to sell the CECs it is collecting (and/or has collected) from that generation. There are two reasons that including existing generation would be very problematic for Ontario ratepayers and electricity generators:

1. Ontario ratepayers – including large power consumers – have made investment decisions to operate businesses in the province based on the expectation that the IESO would retain the EAs it is currently receiving from generators, which keeps the grid emissions factor low and has contributed to making investment in Ontario favourable as compared to higher-emitting regions to the south. If the IESO were to sell those CECs to specific parties, any entity not purchasing the CECs would see their emissions climb, making it harder to meet their voluntary emissions reduction goals. The only solutions would be for those ratepayers to purchase CECs, effectively paying twice for the same environmental benefit – once in their rate paid to the IESO and again to the IESO for a CEC – or to move their business operations outside Ontario. Such solutions are unfair to all existing ratepayers.

2. Additionality is a standard of credible registries. CECs from power generation projects that have already been operating for years would not meet this test. In addition, registering CECs from operating power generation projects as equivalent to CECs from new generation would undermine the value of CECs in Ontario for generators, potential buyers, and ratepayers. Therefore, CECs should be created only from incremental generation tied to new and repowered projects for at least 20 years from COD and/or from the incremental generation of uprated or expanded facilities for the portion of the generation tied to the update or expansion.

Basic Features of a Registry

A CEC registry could be a web-based tool accessible from standard internet browsers that allows for the recognition, display of certification, tracking – including the tracking of transfers and retirements of CECs. The registry itself is not a market, as financial arrangements are made separately between the seller and purchaser. The registry can act as a tracking system which would allow access for all Ontario-based non-fossil fuel generation facilities to enroll and certify their generation, track ownership of the credit, and retire the CEC so that it can not be claimed by any other party. The registry could require:

- *Information about each CEC including a unique identifying tag, the generating facility name and location, date of generation and fuel source, third-party certifications (if applicable), etc.*
- *Methods for tracking each CEC to verify the creation date, source, owner traceability, and status (retired, active, expired).*
- *Documented operating procedures for CEC creation, certification, tracking, transfer, and retirement; user registration and account structure; and data security, confidentiality, and dispute resolution.*

Future iterations of a registry for Ontario-generated credits could expand beyond these features to potentially include other products or more advanced tracking features.

Enbridge supports the MOE's proposal that the CEC Registry itself would not be a market. The CEC Registry does not need to provide that functionality as existing markets are sufficient, and the IESO and the MOE are working on further enabling business-to-business collaboration on Corporate Power Purchase Agreements (PPAs) and other enabling legal and regulatory frameworks. We agree that the CEC Registry is best suited to providing identification and tracking information.

We further support the MOE's proposal to include a unique identifying tag, the generating facility's name and location, date of generation, the fuel source, and third-party certifications in the CEC Registry. We reiterate that CECs should be created only from incremental generation tied to new and repowered projects for at least 20 years from COD and/or from the incremental generation of uprated or expanded facilities for the portion of the generation tied to the update or expansion. The information the MOE proposes to provide will help buyers verify the CECs and enable them to purchase CECs from the sources most consistent with their emission reduction commitments.

Enbridge notes that the MOE's description above envisions only "non-fossil fuel generation facilities" would be able to enroll and certify their generation. The description should instead say "any non-emitting generation" to ensure that turboexpanders-, RNG-, and natural gas with CCUS-related power production are eligible to participate, where the power is non-emitting, even though the facility may consume fossil fuels for unrelated activities. As above, it should be made clear in the registry what kind of generation resource is providing the credit.

We support the development of methods for tracking each CEC to verify the creation date, source, owner traceability, status, and operating procedures as described in the MOE's proposal. These methods and operating procedures should be as consistent with established registries in other jurisdictions as possible to enable future interoperability and tracking across the market and political borders. This development work should also be subject to consultation with EA generators and buyers with significant operational and market experience to contribute, and we look forward to ongoing participation in such consultations.

Proposal

The ministry is contemplating the following changes to legislative and regulatory powers (note that the following does not represent an exhaustive listing of the various elements of the proposal and other items may be added and these items may be amended as the Government deems necessary):

- *Provide authority to the IESO to establish or designate a CEC registry for Ontario, and specify the administrative requirements for a CEC registry for use in Ontario.*
- *Authorize the IESO to act as a market participant, and to make available the CECs it holds.*
- *Allow the minister to set rules and requirements for the operation of, or participation in, the registry.*
- *Allow the minister to direct how the revenues from CECs created by regulated assets owned by Ontario Power Generation Inc. or CECs arising from the IESO's procurement contracts should be used, including directly benefiting ratepayers and supporting the future development of new clean energy in the province.*
- *Ensure the retirement of CECs associated with generation facilities in Ontario is allocated to electricity loads (electricity consumed by entities) within the province of Ontario.*
- *Add reporting requirements for the sale and retirement of CECs to ensure transparency and accountability.*

The registry would be enabled in a manner that preserves future flexibility for interconnection with other markets, treatment of import/export of electricity, and treatment of new generating facilities.

Enbridge generally agrees with the proposed areas of further legislative and regulatory changes needed to support the development of a CEC Registry in Ontario.

However, the IESO should not act as a market participant while it also administers the CEC registry.

We interpret the MOE's proposal that the IESO would be authorized to act as a market participant applying only to Ontario's EA market and not to the IESO-administered market. It would not need to act as a market participant in the IESO-administered electricity market to sell any EAs it may purchase during the course of its duties as Ontario's power purchaser, as CECs would be sold alongside but separate from the IESO-administered markets.

The MOE should clarify that the IESO would be eligible to register and transfer CECs on the Registry and that its market participant status would apply only to its ability to sell the CECs it has acquired from generators and would not permit it to generate CECs or electricity in Ontario. We also recommend that if the IESO is able to operate as a market participant in the CEC market, then it should not be the entity administering the CEC registry, as it creates an inherent conflict of interest that is unfair to the IESO and all other market participants. If the IESO wants to become a market participant in the environmental attribute market, it should be required to have an independent agency administer the CEC registry.

We also reiterate that the IESO should not be able to sell CECs from existing generation as it would unfairly prejudice ratepayers who may have made investment decisions based on the IESO holding those EAs on behalf of all Ontario ratepayers.

As noted above, the MOE should enable the transfer and sale of CECs generated within Ontario to jurisdictions and

markets outside of Ontario as soon as possible and to ensure the CEC Registry is interoperable as to do otherwise will unnecessarily limit the opportunities for Ontarian businesses, jobs, and to reduce electricity costs for ratepayers.

Finally, Enbridge reiterates that the details of the above proposals, including what reporting will be required, the lifetime/expiry of CECs, the period post-commercial operation for which a project can generate CECs, how information is shared in real-time, specific design for hydrogen to participate, how the residual grid emissions intensity will be produced and report, and more, will require further consultation to ensure that the CEC Registry achieves what the MOE intends for the economy and ratepayers. The MOE's proposed details are not available at this time, so we are unable to provide specific comments on those items, but the MOE should take the time to hold meaningful consultation on those design details and related regulatory updates before finalizing the CEC Registry design, even if it means the January 1, 2023 date must be pushed back a little. We look forward to ongoing participation in those consultations to help ensure this important step in Ontario's participation in the low-carbon economy benefits Ontario businesses, workers, and ratepayers as the MOE intends.

Conclusion

Thank you for this opportunity to provide input on the Development of a CEC Registry. If you have any questions, please do not hesitate to contact Islam Elsayed, Government Affairs Specialist (islam.elsayed@enbridge.com).