

November 22, 2020

Ministry of Energy, Northern Development and Mines,
Conservation and Renewable Energy Division
77 Grenville St. 5th Floor
Toronto, ON M7A 2C1

Attention: Cassandra Rosen

**RE: City of Toronto's Recommendations
ERO# 019-2531 - Changes to Ontario's Net Metering Regulation to
Support Community-Based Energy Systems**

Thank you for the opportunity to submit comments on the above referenced matter.

We recommend very specific changes to the net-metering regulation to address existing unnecessary barriers to implementation, stimulate innovation in community scale energy projects, drive economic growth, attract private investment, and create jobs.

BACKGROUND

Toronto continues to experience significant growth, including the construction of new multi-residential buildings, commercial buildings, as well as, academic and health care campus redevelopment/expansions. Along with the growth trend, there is a move towards electrification (fuel-switching) in buildings and vehicles, consistent with Toronto's Transform TO Climate Action strategy.

The City has committed to net zero emissions by 2050 or sooner with more than 75% of energy to be sourced from renewable and low-carbon sources.

To meet these emissions and energy targets, Toronto will need 4 to 5 Gigawatts of renewable energy, and 1 GW of electricity storage, much of which can be implemented at the community/neighborhood/campus/site scales. Updating current net-metering regulations can remove existing unnecessary barriers to implementation

Our recommendations are summarized on the following page, and described thereafter.

Key Recommendations:

- 1. Allow Virtual Net Metering (VNM)**
- 2. Continue allowing Time of Use (TOU) Billing for Net Metering**
- 3. Make grid connection availability and process transparent, and streamlined for time/cost effectiveness.**
- 4. Alignment with other policies:** Environmental Activity and Sector Registry (EASR) and Renewable Energy Approval (REA) for carports.
- 5. CNM Program design elements**
 - a) Tenant Aggregation:** Multiple Customers, Single Site
 - b) Multi-Site Aggregation:** where the sites are not owned by the same entity but are adjacent/adjoining
 - c) Participation of low to moderate-income energy customers**
 - d) Shorten the evaluation period of demonstration projects**

1. Virtual Net Metering (VNM)

Traditional Net Metering requires onsite energy generation behind one specific meter, which limits the uptake of solar. Toronto's dense urban environment with grid constraints, shading from adjacent buildings, space restrictions and conditions, lack of ownership of roofs (renters) etc., requires flexibility for renewable energy implementation. VNM addresses these issues by allowing renewable energy (RE) like solar to be installed on sites that are optimal for RE production, instead of limiting the opportunity to the location of the members of the Community Net Metering project, or other similar limitations.

We recommend that Virtual Net Metering projects be considered for the demonstration projects that allow CNM subscribers/members/customers located anywhere within the electric distribution company service area to participate.

2. Use Time of Use (TOU) Billing for Net Metering

We support the continued use of TOU pricing for Community Net Metering. With TOU, solar allows more customers to avoid expensive peak energy periods. TOU pricing accurately reflects the value that solar systems provide in terms of offsetting the need for natural gas peaking power plants during on-peak periods.

3. Make the grid connection availability and process transparent and streamlined for time and cost effectiveness

- a) ***Require urban local distribution companies to regularly publish a connection capacity map.*** For example, Minnesota's utility (Xcel Energy) [hosting capacity map](#). Hosting capacity refers to the amount of DER that can be accommodated on the existing system without adversely impacting power quality or reliability. These opportunity zones could also be aligned with the utilities and the IESO's Regional Planning Process as a way to consider DERs potential to meet future supply needs, as well as, make the necessary investments to remove DER connection constrains.
- b) ***The application process is complex and onerous*** (rules and fees). There is little transparency on interconnection decisions. Interconnection fees can range from \$500-2,000, and up to \$10,000 if a project exceeds 10kW to 15 KW, significantly changing the business case.

We recommend that fees be limited to a cost recovery fee with transparent rates/calculation formula for predictability.

4. Alignment with other policies: Environmental Activity and Sector Registry (EASR) and Renewable Energy Approval (REA) for carports

- a) Currently the Ministry of Environment requires an REA to be completed for solar carports over 500 kW. Carports on previously disturbed lands (i.e. parking lots) should not be required to undertake a full environmental assessment as carports do not pose any additional threat to the land/soil.

We recommend that the regulation be updated to either exempt carports from REA requirements, or at a minimum allow for an EASR-like streamlined process for all carport projects, regardless of their system size.

- b) Siting restrictions impose a 15 meter setback from the facility property boundaries for Non-Rooftop Solar PV Facilities (includes carports and canopies on paved areas). The 15 meter setback from the property boundary rules out many appropriate sites for solar carport installations. Moreover, the 15 m setback can reduce system size by 50 %.

We recommend that non-rooftop solar PV facility be granted an exemption from 15 meter setback when it is sited over a paved area or on a parking lot.

5. Program design elements:

We appreciate the opportunity to learn about the Ministry's specific scope for the demonstration projects.

We find the Basic Meter Aggregation: Single Customer, Campus Site model restrictive

The proposed basic level on aggregate Net Metering, whereby a single customer is able to offset multiple billing meters located on the same property (or adjacent/adjoining properties) with credits from the RE system is restrictive. The requirement that the CNM customers must be the owner of all meters, and that the property be owned or leased by that same customer makes this option restrictive. But it is a step forward to include properties that were left out of the current Net Metering program.

a) We support Tenant Aggregation: Multiple Customers, Single Site

Toronto has a growing number of multiunit residential buildings with individually metered suites, and current Net Metering requirements are actively deterring solar uptake. Multiunit buildings with separately metered tenants cannot install solar as the NM program requires the RE system to be sized according to the consumption load of a given customer meter. For example - a rental apartment building owner cannot install a solar system that produces more energy than the consumption load of the common area as the tenants manage their own electricity meters.

We recommend allowing aggregation of total consumption load of all units (meters) onsite, irrespective of ownership of meters, to size the CNM system. This recommendation is particularly important for the City of Toronto's building portfolio' that are not bulk metered. A "virtual" bulk meter that totals the consumption of all meters should be considered.

b) We support Multi-Site Aggregation where the sites are not owned by the same entity but are adjacent/adjoining)

We highly recommend that multiple building owners be allowed to form a community/consortium to count as a single CNM customer. This can include customers from the same electricity rate base or a different rate base like residential and commercial. This would increase the financial viability of projects as funding responsibility is shared. We realize that the industrial sector is currently being excluded from the demonstration projects, although they typically have ideal roof space for solar and it would therefore be a lost opportunity to leave them out of the CNM program.

We highly recommend that condominium corporations partner up with commercial building owners for a CNM project and the 'single CNM customer' rule not deter their participation. Condominium rooftops usually have limited space to install a large system, hence partnering up with a neighboring property owner with more roof space would make solar more viable.

c) We recommend the CNM support the participation of low to moderate-income energy customers.

We appreciate that the project highlights the participation of Indigenous communities, and we recommend that you encourage participation of low to moderate-income energy customers as well. CNM programs in the US are increasingly expanding access to the benefits of RE for low-income energy customers. For example, in Colorado the utilities reserve 5% of solar projects to low-income participants.

It is not clear from the proposed model how benefits will be shared. We would like to see a mechanism that passes on some of the benefit from the main CNM customer to the sub metered residents (energy customers), particularly low to moderate-income energy customers.

d) Shorten the evaluation period of the demonstration projects from 5 years to 2 years.

We support the government's evaluation of demonstration project to inform/develop energy policy. Reducing the evaluation period for demonstration projects from 5 years to 2 years would go a long way speeding-up the cycle of innovation -> demonstration -> evaluation -> policy changes for broader implementation.

We are looking forward to continue to engage with the government on removing existing unnecessary barriers to implementation of urban energy projects, stimulate innovation in community scale energy projects, drive economic growth, attract private investment, and create jobs.

Should you have any questions or comments about this submission, please contact Nageen Rehman, Program Manager, Environment and Energy Division, at Nageen.Rehman@toronto.ca.

Sincerely,

A handwritten signature in blue ink that reads "Nageen Rehman". The signature is written in a cursive style and is positioned above a faint, light blue rectangular stamp.

For Fernando Carou, B.A.Sc, P.Eng.
Manager, Public Energy Initiatives
Environment and Energy Division