

**Webinar on Potential Updates to Ontario's Net Metering Program:
Third-Party Ownership and Virtual Net Metering**

Thursday, January 12, 2017

Summary of Participant FAQs

PRICING

1. Will net metering customers be able to remain on time-of-use pricing?

Most local Distribution Companies (LDCs) in Ontario will bill residential net-metered customers on the Tiered Pricing structure of the Regulated Price Plan. There are two reasons why an LDC may not be able to credit a net-metered customer at Time-of-Use (TOU) rates:

- Investments are required to configure the IESO's Meter Data Management and Repository (MDM/R) to accept generation data. The MDM/R is the central database that collects, validates, estimates, edits and delivers billing quality data from smart meters to LDCs.
- Investments may also be required in many LDC communications and/or billing systems to collect, transmit, and process generation data.

These investments have not been made to date, because with limited uptake of net metering since the microFIT and FIT programs were launched, it has been more cost-effective for LDCs to switch net-metered customers to Tiered Pricing and perform billing functions manually.

As reported by LDCs to the Ontario Energy Board (OEB) for 2015, there is over 9 megawatts (MW) of net metering capacity in Ontario, representing approximately 680 facilities.

For comparison, Ontario has over 210 MW of micro-scale renewable capacity online under microFIT (<10 kW), over 380 MW of capacity online under small-FIT (>10 kW and up to 500 kW), and over 2,800 MW of capacity online under large-FIT (>500 kW).

The Ministry will be undertaking a cost-benefit analysis in 2017 to help inform whether the required investments should be made to enable province-wide TOU

billing for net-metered customers.

2. How will net metering customers be compensated? Is the Ministry of Energy considering different compensation for Third-Party Ownership (TPO) or Virtual Net Metering (VNM) models?

During development of the “Part 1” updates to the net metering program, compensation mechanisms were examined in detail. As indicated in its August 19, 2016, posting to the Environmental Registry of proposed updates, and as reflected in the [amended regulation](#), generators will continue to be compensated on the same basis as they are charged for consumption of electricity as consumers (i.e. volumetric electricity rates).

The Ministry considered a number of factors in deciding to maintain compensation at volumetric rates, including expected ratepayer costs, stakeholder feedback on the value of simplicity and consistency across the province, as well as the OEB’s decision to implement fixed distribution charges for residential customers.

The Ministry will also undertake a cost-benefit analysis of the program every three years, as required, to understand and address cost-shifting that may occur from compensating at volumetric electricity rates.

TIMING

3. What is the expected timing of implementation of the “Part 1” program updates?

“Part 1” amendments to the Ontario Net Metering Regulation will be in force July 1, 2017. The amended regulation, filed February 8, 2017, is available online at the following web address: <https://www.ontario.ca/laws/regulation/r17024>

4. What would be the expected timing of the potential “Part 2” program updates for Third-Party Ownership (TPO) and Virtual Net Metering (VNM)?

The Ministry is engaging stakeholders and Indigenous communities and groups during the months of January, February and March 2017. Following this process, any proposed changes to the net metering program related to TPO and VNM would

be posted for public comment on the Environmental and Regulatory Registries in Spring 2017.

Implementation of any changes to the net metering program related to TPO and VNM, pending legislative and regulatory processes, would likely be in 2018. Implementation timelines will also be informed by any potential changes to billing and administrative systems that would be required on the part of electricity distributors.

PROGRAM DEVELOPMENT

5. What specific program rules are being considered by the Ministry for Third-Party Ownership (TPO) and Virtual Net Metering (VNM), such as contract terms, restrictions on location and eligible ownership structures?

The Ministry of Energy is engaging stakeholders and Indigenous communities and groups to better assess the potential impacts that could result with TPO and VNM. Feedback received through this process will inform program design that could be proposed for consideration.

The regulatory and legislative framework for net metering in Ontario has been in place since 2005 and does not currently contemplate the types of ownership arrangements or project configurations that TPO and VNM present.

Industry and electricity consumers have expressed interest in expanded business models and project configurations that could allow for broader participation in net metering and could involve aggregation of loads, shared generation arrangements and participation by third parties.

The Ministry wants to ensure that the potential impacts of introducing changes to the program are carefully assessed and that a range of options are evaluated to best achieve the objectives of the program and broader energy policies.

6. Is the Ministry considering any changes to the terms of agreements between net metering customers and their Local Distribution Companies (LDCs) (e.g. fixed-term contracts)?

The net metering regulation requires LDCs to provide net metering to eligible customers upon request, subject to the terms of the regulation and other distributor license conditions (e.g. the Distribution System Code (DSC)).

The regulation provides a consistent net metering program across the province and reasonable assurance to both customers and LDCs for investments made to facilitate net metering. The Ministry intends to maintain a consistent approach to the terms of agreements currently set out in the regulation.

The net metering regulation allows participants with existing net metering agreements (prior to the effective date of the Regulation) the option of entering into new agreements which reflect the updated provisions of the Regulation, or of maintaining their existing agreements. In the amendments filed February 8, 2017 extended the opt-in provision to net metered customers with agreements before July 1, 2017.

Local distribution companies serving diesel-reliant remote First Nations and other remote communities (Hydro One Remote Communities Inc. and Independent Power Authorities) are exempt from offering the provincially-regulated net metering program due to unique technical considerations, and because they are not licenced or regulated by the Ontario Energy Board. However, these distributors may develop and offer their own net metering programs to offset diesel generation. Hydro One Remote Communities Inc. , which serves 21 remote communities (including 15 remote First Nations), currently offers its own renewable generation initiative and net metering program to its customers.

7. What technologies would be considered eligible under the updated net metering program?

The net metering regulation requires an eligible generator to generate electricity from a renewable energy source, which is defined in the *Electricity Act, 1998*.

The proposed “Part 1” updates are intended to provide increased opportunities for Ontarians to generate renewable energy onsite to meet their own energy needs by broadening eligibility and removing barriers to new technologies, such as the pairing of energy storage with renewable generation.

The Ministry intends to maintain the criteria for electricity to be generated from a renewable energy source for any potential Third-Party Ownership (TPO) or Virtual Net Metering (VNM) models.

8. What types of eligible ownership structures and project configurations is the Ministry considering?

The current net metering program limits the types of ownership structures and project configurations to those where electricity customers (i.e. customers of electricity distributors) generate renewable energy onsite to meet their own energy needs.

Updates to the net metering program are intended to support customer choice in generating clean renewable energy, help reduce load on the electricity system and enable innovative technologies and customer-utility relationships.

The Ministry will be examining potential business models and project configurations that could be enabled under Third-Party Ownership (TPO) and Virtual Net Metering (VNM) models as well as associated impacts of including them in the net metering program.

Decisions to enable new types of eligible ownership structures and project configurations will consider the following objectives which remain consistent with the “Part 1” effort to update the net metering program:

- 1) Reduce ratepayer costs associated with small-scale renewable generation, with the ultimate goal of achieving a self-sustaining program.
- 2) Support Ontario’s Conservation First policy by ensuring systems are right-sized and sited close to load.
- 3) Reflect the costs and benefits of integrating net metered generation into the electricity system, and recover the costs efficiently and equitably.
- 4) Continue to offer consumers choice to offset their load using renewable energy, subject to system need and cost considerations.

9. If a large net-metered system was installed on reserve land, could the credits be balanced to all First Nations accounts within the reserve?

The Ministry understands that Third-Party Ownership (TPO) and Virtual Net Metering (VNM) models could be well suited to facilitate renewable generation in Indigenous communities and will be exploring potential applications through engagement with Indigenous communities and groups as part of its engagement process.

At this time, the Ministry remains open to feedback on approaches for the participation of First Nation and Métis communities, including remote communities. Please provide your comments on proposed approaches that should be considered to feedback.to.CEE@ontario.ca.

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Hydro One Remote Communities Inc., which serves 21 remote communities (including 15 remote First Nations), currently offers its own renewable generation and net metering program to its customers. Hydro One Remote Communities Inc.'s Renewable Energy INnovation DiEsel Emission Reduction (REINDEER) program enables the connection of renewable energy projects to reduce the impact of diesel use on the environment. For more information about the REINDEER program, please contact Hydro One Remote Communities Inc. at 1-800-465-5085.

CONNECTION CAPACITY

10. Will the Ministry be considering any changes in the context of the net metering program to address connection capacity limitations?

Electricity distributors will continue to be responsible for reviewing connection applications. Net metering connections will continue to be subject to the interconnection rules for embedded generation outlined in the Ontario Energy Board (OEB) Distribution System Code (DSC).

11. Will the Ministry be reviewing the connection thresholds or “caps” for distributed generation installed on distribution systems?

The Ontario Energy Board (OEB) Distribution System Code (DSC) contains provisions for electricity distributors to limit net metering capacity at one percent of a distributor's total throughout. The OEB has signalled in [EB-2012-0410](#), “A New Distribution Rate Design for Residential Electricity Customers,” that, as a result of the new rate design, it will review the current restrictions on net metering and customer-owned renewable generation.

Hydro One imposes limits on the amount of PV solar generation that can be connected to their distribution system in order to preserve reliability and quality of supply to existing load customers and distributed generators. Hydro One commissioned a study in 2011 by Kinectrics of its connection thresholds and rules (i.e. “7% rule”) to ensure they are at appropriate levels to maintain safety while accommodating new generation. The report concluded that Hydro One’s position is prudent and reasonable. The standards Hydro One follows are based on science and engineering best practices, as set out by the Institute of Electrical and Electronic Engineers (IEEE).

Hydro One indicated that it is committed to taking the recommendations in the Kinectrics report seriously, and has completed a number of other studies as suggested in the report. The results of these studies have not indicated a need to revise the 7% rule at this time.

For more information on Hydro One’s connection procedures for new renewable generation, please contact Hydro One Distributed Generation Connections at: DxGenerationConnections@hydroone.com or 1-877-447-4412.

PERMITTING/ENVIRONMENTAL APPROVALS

12. Will Environmental Activity and Sector Registry (EASR) apply to ground-mounted solar projects under or above 500 kW?

The solar EASR is a streamlined self-registry process for certain eligible ground-mounted solar photovoltaic (PV) projects larger than 10 kW, up to and including 500 kW. For more information on the solar EASR, please see guidance material at:

<https://www.ontario.ca/page/small-ground-mounted-solar-facilities-user-guide-environmental-activity-sector-registry-easr>

For ground-mounted solar PV projects larger than 500 kW a Renewable Energy Approval (REA) would generally be required. In general, projects larger than 10 kW, up to and including 500 kW that don’t meet the EASR criteria would also require a REA. For more information on the REA process see: <https://www.ontario.ca/page/renewable-energy-approvals>

The EASR and REA processes are administered by the Ministry of the Environment and Climate Change (MOECC). For further information, please contact

MOECC. Their contact information is: Toll-free: 1-800-461-6290 or
Email: EAASIBGen@ontario.ca

PILOT PROJECTS

13. Has there been discussion of having pilot projects to inform policy development for Third-Party Ownership (TPO) and Virtual Net Metering (VNM)?

The Ministry has monitored pilot projects involving net metering in Ontario and recognizes the potential for pilot projects to enable innovative technologies and customer-utility relationships.

Although the Ministry has not identified specific needs for pilot projects related to its work on examining potential impacts of TPO and VNM, stakeholders and Indigenous groups are encouraged to identify and communicate to the Ministry, through its questionnaire or a written submission, pilot project concepts, existing barriers to projects they may be considering and potential program design changes that could be made to address them.

Existing programs for innovative energy technologies, such as the Ministry of Energy's Smart Grid Fund and the Independent Electricity System Operator's Conservation Fund, have provided funding for pilot projects related to net metering and the integration of distributed generation.

INCENTIVES

14. Will the updated net metering program include some sort of incentive or grant to promote its adoption?

The intention is to develop a long-term, enabling framework that aligns with value to the electricity system and that fairly allocates costs and benefits among all ratepayers.

According to Natural Resources Canada (NRCan) and the Canadian Solar Industries Association (CanSIA), solar PV is set to reach grid parity in various Canadian jurisdictions between now and 2022. Grid parity means that the cost of

generating electricity from a solar PV system would be about the same or less expensive than purchasing power from the electricity grid over the lifetime of the renewable energy system. This means that there will be less need for direct incentives to drive uptake.

The Government may separately propose incentives for activities that achieve GHG reductions as part of its Climate Change Action Plan (CCAP), for which net metered customers may be eligible, depending on the criteria established.

15. How will net metering be integrated into the Ontario Climate Change Solutions Development Corporation (OCCSDV) or Ontario's Climate Change Action Plan (CCAP)?

Net metering is an enabling program that can work with other initiatives developed under Ontario's CCAP. Details of the OCCSDV and funding under Ontario's CCAP are still under consideration by the Ministry of Environmental and Climate Change (MOECC).

The CCAP does, however, identify opportunities that would be enabled by net metering, including facilitating near net-zero and net-zero energy homes and buildings.

The MOECC recently posted a draft regulation for the establishment of what it is now referring to as "the Ontario Climate Change Solutions Deployment Corporation", which was formerly referred to as the "Green Bank". MOECC posted this draft regulation on the Environmental Registry on December 15, 2016 for public review and comment until January 30, 2017. This posting can be accessed at:

<http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTMxMTUx&statusId=MTk4ODM5>

Please direct questions regarding the proposed OCCSDC and its activities to MOECC directly. Contact information for the branch leading the development of the OCCSD can be found on the posting linked above.

16. Is net metering an eligible Conservation and Demand Management (CDM) program under the Conservation First Framework (CFF)?

Ontario's Conservation First Framework includes small-scale customer behind-the-meter generation (<10 MW) as an eligible CDM activity. Generation must meet the

broader aim of reducing a customer's electricity consumption and reducing draw from the electricity grid.

Net metering involves the transfer of electricity into the electricity grid, which does not align with the Framework's intention of reducing draw from the grid.

Also, distributors are required to offer net metering by government regulation, and the Framework specifically excludes activities promoted through a different program or initiative undertaken by the Government of Ontario.

FIT/microFIT

17. With FIT and microFIT winding down at the end of 2017, what is being done to bridge the gap until updates are made to the net metering program?

Implementation of the updated program would coincide with the winding down of Ontario's FIT and microFIT programs. The microFIT program has a 50 MW rolling procurement in each of 2016 and 2017. The microFIT program will stop accepting applications by the end of 2017. FIT 5 will have a target of 150 MW. The Application Period was open from November 7, 2016 to November 25, 2016.

The amendments for "Part 1" updates, which were filed on February 8, 2017, and now available on e-Laws, include removal of the 500 kW size limit and allowance for the pairing of energy storage with renewable generation for the purpose of net metering and are proposed to be in force July 1, 2017.

Pending government decision processes and legislative and regulatory processes, there could be a target implementation date for Third-Party Ownership (TPO) and Virtual Net Metering (VNM) updates during 2018.