

**Third-Party Ownership & Virtual Net Metering
Questionnaire**

Section 1: General Information

1) Organizational contact information:

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2) Please indicate which category best describes your organization (*please check applicable box*):

- Local Distribution Company (LDC) Large utility (over 100,000 customers)
- Medium utility (12,500 to 100,000 customers)
- Small utility (under 12,500 customers)
- Industry (renewable energy developer, supplier or association)
- Provincial government or government agency
- Municipality Large municipality (over 100,000 population)
- Medium municipality (30,000 to 100,000 population)
- Small municipality (under 30,000 population)
- Institution (university, college, or other) Co-operative
- Indigenous community/organization First Nation organization
- Métis Organization

xOther (*Please specify...*): Sustainability & Community Energy Champions

3) Are you currently involved with net metering in any of the following ways? *(please check all applicable boxes)*

Net metered electricity customer

Electricity distributor providing net metering to customers

Provider of renewable energy or other related products or services

Other *(Please specify...)*

Not involved in net metering

Section 2: Third-Party Ownership

Background:

Third-party ownership involves a company (third-party) owning and operating a renewable energy system and selling electricity to one or more customers under a power purchase agreement or similar arrangement. The customer, participating under a net metering arrangement with their LDC, can receive bill credits for electricity delivered to the grid from the third-party owned renewable generation system.

Third-party ownership models could potentially provide a property owner with an opportunity to participate in a net metering project without the full upfront capital cost of purchasing and installing a renewable generation system themselves. They may also be applicable to facilitate certain types of virtual net metering models (See Section 3).

Ownership and operation of generation facilities by third parties is not contemplated by the current net metering framework, which requires that the person who owns or operates the generation facility will also be consuming that electricity on site.

Explicitly including third-parties in an updated net metering program would require LDCs to allow these types of projects, subject to technical constraints. Whether third-parties decide to operate in Ontario under the net metering program may depend on a number of other factors such as project economics.

Third-Party Ownership and Virtual Net Metering

- 1) Will broadening the scope of Ontario's net metering program to include third-party ownership models provide net benefits to net metering customers?

YES

- a. *Third-Party Ownership (TPO) will enable more residents and business owners to become Net-Metering (NM) customers (those for whom capital expenditure is prohibitive to installing a renewable energy facility). This will enable more customers to generate energy, save money, and reduce their carbon footprint.*
- b. *As the NM program is voluntary, suppliers will need to ensure that prices paid per kWh would be lower than those otherwise payable to the LDC, so that uptake will be driven by cost considerations. Thus competition among TPOs will lead to lower costs for consumers. Additionally, TPOs could benefit from economies of scale, and pass savings to customers.*
- c. *TPO could also provide electricity price certainty to residents and business owners in the form of a fixed-price or indexed-price Power Purchase Agreement (PPA). This could also simplify billing for customers.*
- d. *Potential for reduced impact to customers during temporary grid outage if the net metered facility includes energy storage*

- 2) Will broadening the scope of Ontario's net metering program to include third-party ownership models provide net benefits to Ontario's electricity system?

YES

- a. *Broadening of the program will increase distributed generation and self-consumption, thereby displacing distributed loads from the grid.*
- b. *Broadening distributed generation will improve the resilience of the grid by offsetting vulnerability to upstream supply disruptions.*
- c. *Enabling LDC (third party) ownership could allow LDCs to target specific areas within their territory that are grid constrained, and possibly defer or avoid the need for costly new grid infrastructure or major upgrades and associated rate increases.*
- d. *Since solar generation is typically at peak during peak consumption periods of the day, this will help LDCs and the IESO manage peak shaving and/or peak shifting.*
- e. *Properly designed, TPO could reduce billing administration costs for LDCs (if many accounts were managed by one TPO).*

- f. *Third party ownership will improve the economies of scale for entities with significant investments in net metered assets, by enabling volume discounts in capital costs, financing costs and operating expenses.*
 - g. *Expanded implementation would also result in*
 - i. *Reduced demand for peak load generation*
 - ii. *Reduced carbon output (provided only renewable energy is allowed under NM regulations)*
 - iii. *Less strain on the grid – Resources operate more efficiently and last longer*
 - iv. *Avoided losses associated with long-distance electricity transmission and distribution*
 - v. *Reduced need for new grid infrastructure or major upgrades*
- 3) How important is the outcome of any potential decisions to include or not include third-party ownership models under Ontario’s net metering program to your organization/community/industry?

Very Important

- a. *OSEA exists, in part, to promote and expand the use of renewable energy in Ontario. We believe that a NM/SC program that allows third-party ownership is a natural and important transition from the FIT program that allows third-party ownership, particularly with respect to municipalities, co-operatives, and aboriginal communities.*
 - b. *Without third-party ownership, uptake of the program would be largely limited to only those residents and business owners that have the capital to implement the projects. As a result the program would likely have a limited impact on grid load and future demand, and the renewable energy sector would suffer further decline.*
 - c. *Aboriginal communities, Co-operatives, Municipally-owned LDCs, developers and others may develop opportunities for new revenue streams from third-party ownership models for net metered facilities.*
- 4) What impact to your organization/community/industry would you anticipate if third-party ownership models were to be included under Ontario’s net metering program?

Very positive

OSEA’s membership is made up of manufacturers, developers, community energy proponents and participants, LDC representatives, and many other experts and consultants who make up the renewable energy sector. We believe the expansion of the NM program in Ontario will have beneficial impacts for virtually all parts of our

membership. We generally presume that third-party ownership will lead to increased uptake of NM contracts in Ontario.

- a. As FIT / microFIT come to a close in Ontario, solar developers, their consultants, and financiers, will be able to leverage the experience they have gained to date, and continue to offer services to residents and business owners interested in making use of renewable energy opportunities.*
- b. Many of OSEA's members, including LDCs, co-operatives, and aboriginal communities, can be expected to find ways to participate in the program, expand their business operations and reach, and build on the expertise they have developed under the FIT and microFIT programs. This will also allow them the opportunity to become vertically integrated, offering greater energy choices to their customers and members.*
- c. Third party ownership will support many of our members by providing increased business and high quality manufacturing and non-manufacturing jobs in the clean-energy sector in Ontario. This will build on the expertise and business relationships that have developed under the FIT and LRP.*

5) What potential issues or challenges could arise with the inclusion of third-party ownership models under Ontario's net metering Program?

- a. As has been seen with third-party ownership of microFITs, residents and business owners may be adversely impacted by working with third party intermediaries. Risks include hidden costs borne by the facility owner when unforeseen events occur with their roofs (i.e. leaks or damage to the roof that require temporary re-location or removal of the solar array). Ideally, the MOE and the OEB will work with industry and LDCs to develop standard contracts to govern the third party relationships, protect property owners and the grid, and provide more certainty to all parties.*
- b. Assuming third party ownership will result in increased uptake of NM, it is reasonable to assume that the administrative burden for LDC will be increased as many companies will be represented as distributed generators. However, the increased burden should be short term as methods of administering multiple accounts is established, and MOE should maintain oversight to ensure that customers are not unnecessarily burdened with LDC administration costs on their electricity bills.*
- c. LDCs will be challenged with a reduction in consumption-based revenues, and may feel a need to further shift in the direction of fixed rates. The risk is that this could deter potential growth in the NM program. Some mechanism is required to ensure that investments made into renewable energy facilities can be recouped;*

at the very least the risk for new arrivals cannot be that the benefit of their system will be clawed back through the Global Adjustment or increased fixed costs.

- d. The ministry should ensure that LDC fixed costs (and likely new TPO account set-up fees) are reasonable and standardized across the province. We have seen significant price variation among LDCs for providing the same services, i.e. costs for CIA's vary significantly from LDC to LDC. Perhaps the Ministry can approach these fixed costs in the same way the province approaches vehicle licence renewal – It's the same for everyone, regardless of the region within Ontario. This will provide price certainty to the investments made by TPOs regardless of the LDC.*
- e. Pending MOE / IESO direction on TOU rates for Net Metering generation, this requirement could become a priority for MOE to address. Timing for developing a solution for TOU should not delay third-party Net Metering, but the program must enable TOU rates to be implemented once the technical and regulatory challenges of doing so have been dealt with.*

6) What specific policy objectives or program design issues are important to your organization/community/industry in considering how third-party ownership models could be enabled or restricted under Ontario's net metering program?

- a. Policy certainty is essential to us. Policy certainty reduces risk, which enables entrepreneurs to determine appropriate strategies for their operations. Reducing uncertainty also reduces costs, which has significant downstream benefits. TPOs will need to know their investment will bring returns, and that the policy environment is stable enough to develop their business.*
- b. Broad participation by individuals and groups in Ontario. Program design should seek to maximize opportunities for new participants by enabling a variety of business models and relationships, as well as various technologies. Broader eligibility will enhance innovation and efficiency, which can also lower costs and help reduce GHG emissions.*
- c. Improving public perception of renewables (in the realm of cost, particularly); we see the expansion of NM as indicative that renewables are a cost-effective component of a reliable electricity supply for the Province. It is necessary to provide systems that are economically viable for the broader public, which is the business of many of our members; but it is up to the regulators to open up the opportunity.*
- d. Equitable treatment of stakeholders, especially in regard to:
 - i. Costs: reasonable sharing of program administration costs and savings among LDC/owners/consumers.**

- ii. *Participation by a wide range of stakeholders and community entities (including where appropriate charities and NGOs, as well as the MUSH sector and other established communities)*
- iii. *Use of a range of technologies that will enable more diverse and thus resilient infrastructure*
- e. *Support the Conservation First Framework by providing incentives to further reduce consumption*

7) Are there specific costs your organization/community/industry would incur if third-party ownership models for net metering were to be made eligible under Ontario's net metering framework?

(please outline potential costs and mitigation strategies in as much detail as possible)

- a. *We expect that our LDC members may incur administrative burdens with increased numbers of participants in the NM program overall; however, it may be possible to reduce that burden if the third party could be the single point of contact for the LDC regarding the NM account billing, and could absorb some of the burden. This would require the third party system owner to oversee the account of specific households or businesses, which may become a costly burden for the third party. Enforcement regarding delinquent accounts could be a challenge.*
- b. *As an alternative to a. the ministry could consider working towards a billing model that allows for a fair distribution of the administration costs between the LDCs and the TPOs.*
- c. *We expect our members will need to provide considerable human resources to work with the MOE, LDCs and other bodies as the policies regarding billing and cost sharing are worked out. In the interests of ratepayer protection, the MOE and the Ontario Energy Board should seek to ensure that customers are not unnecessarily burdened with LDC administration costs or losses on their electricity bills.*

Virtual Net Metering

1) Will broadening the scope of Ontario's net metering program to include virtual net metering models provide net benefits to net-metered customers?

(please check one box and provide rationale below)

YES

- a. *Single customers with multiple facilities (i.e. municipalities, large corporations, etc.) would benefit greatly by having the ability to apply credits from some facilities across an entire portfolio of facilities.*
- b. *The multiple entity model would allow for community solar, wind, biomass and water projects; residents and business owners can apply their portion of the credits to their own electricity billing. This offers considerable opportunities for Co-operatives, municipalities, aboriginal communities, condominium corporations and other organizations to develop shared NM facilities to benefit their members and residents.*

2) Will broadening the scope of Ontario's net metering program to include virtual net metering models provide net benefits to Ontario's electricity system and to all electricity ratepayers?

(please check one box and provide rationale below)

YES

We believe that virtual net metering offers a very attractive model to enable expansion of net metering in Ontario. The benefits described above would also apply; in short, these include:

- a. *Economies of scale offering energy to customers at lower cost*
- b. *DG displacing the need for investments in transmission and distribution infrastructure*
- c. *Distributed solar generation, typically maximal during peak consumption periods of the day, offers savings through peak shaving and/or peak shifting.*
- d. *Reduced demand for peak (natural gas) generation reduces carbon output*
- e. *Less strain on the grid, meaning resources operate more efficiently and last longer*
- f. *A VNM program should enable the trade and takeover of contracts, which creates market benefits in financing and competition, which should reduce costs.*

3) How important is the outcome of any potential decisions to include or not include virtual net metering models under Ontario's net metering program to your organization/community/industry?

(please check one box and provide rationale below)

Very Important

- a. *OSEA sees the rollout of a Virtual Net Metering program as a natural and essential next step in the growth of renewable energy in Ontario. It is critical to the continued success of many of our members, in particular developers, co-operatives and consultants whose business requires continued project development.*
- b. *Without single entity virtual net metering (SEVNM) and multiple entity virtual net metering (MEVNM) programs, the growth of renewables through NM will be limited to individual and business entities with both property and capital, which would exclude a large proportion of potential participants. We believe that the opportunity for continued growth in the sector hinges upon a viable net metering program that includes virtual net metering.*
- c. *Many of the companies that currently participate in the FIT Program in Ontario have developed expertise with building larger scales of systems than would be common under residential net metering. MEVNM provides a more appropriate vehicle for these companies to leverage their expertise and build larger scale systems to serve multiple net metering customers simultaneously.*

4) What impact to your organization/community/industry would you anticipate if virtual net metering models were to be included under Ontario's net metering program?

(please check one box and provide rationale below)

Very positive

- a. *Including SEVNM and MEVNM programs in the net metering models will enable choice for consumers, and provide benefits for individual rate-payers, communities, solar developers and consultants, and LDCs.*
- b. *As FIT / microFIT come to a close in Ontario, solar developers and others will be able to leverage their experience and offer services to residents and business owners interested in participating in the program*
- c. *LDCs, co-operatives, municipalities, aboriginal communities and others could participate in the program themselves, expanding their revenue stream through this new business model.*

5) What potential issues or challenges could arise with the inclusion of virtual net metering models under Ontario's net metering Program?

- a. *There will be considerable administrative costs for LDCs and others as a diversity of ownership structures demands new billing arrangements and communications. MOE or the OEB should develop appropriate guidelines to help LDCs manage SEVNM and MEVNM accounts. MOE must maintain oversight to ensure that costs and benefits are equitably distributed between owner-generators, customers, and LDCs.*
- b. *Participants in the MEVNM program may be vulnerable to exploitative business practices among third party owners. MOE should consider regulating participants, or assisting in the development of standard contracts to govern MEVNM relationships and to protect participants.*
- c. *A "Wild West" in VNM is not unimaginable, and mechanisms need to be in place to protect participants from owners who may take excessive risks.*

6) What specific policy objectives or program design issues are important to your organization/community/industry in considering how virtual net metering models could be enabled or restricted under Ontario's net metering program?

- a. *Policy certainty is essential to us. Policy certainty reduces risk, which enables entrepreneurs to determine appropriate strategies for their operations. Reducing uncertainty also reduces costs, which has significant downstream benefits. TPOs will need to know their investment will bring returns, and that the policy environment is stable enough to develop their business.*
- b. *Broad participation by individuals and groups in Ontario. Program design should seek to maximize opportunities for new participants by enabling a variety of business models and relationships, as well as various technologies. Broader eligibility will enhance innovation and efficiency, which can also lower costs and help reduce GHG emissions.*
- c. *Improving public perception of renewables (in the realm of cost, particularly); we see the expansion of NM as indicative that renewables are a cost-effective component of a reliable electricity supply for the Province. It is necessary to provide systems that are economically viable for the broader public, which is the business of many of our members; but it is up to the regulators to open up the opportunity.*
- d. *Equitable treatment of stakeholders, especially in regard to:*
 - i. *Costs: reasonable sharing of program administration costs and savings among LDC/owners/consumers.*
 - ii. *Participation by a wide range of stakeholders and community entities (including where appropriate charities and NGOs, as well as the MUSH*

(Municipalities, Universities, School Boards, and Hospitals) sector and other established communities)

- iii. Use of a range of technologies that will enable more diverse and thus resilient infrastructure*
- e. Support the Conservation First Framework by providing incentives to further reduce consumption*

7) Are there specific eligibility requirements and technical or administrative restrictions that should be contemplated for SEVNM projects (e.g. locational restrictions for virtual account crediting, treatment of different rate classes for billing administration, and specific compensation terms or charges.)

- a. Customers that have multiple buildings should be able to participate in SEVNM, regardless of the location of their buildings in Ontario. That said, it should be easier to facilitate billing credits within the same LDC service territory; when buildings are in two or more LDC service territories, administering the program between LDCs could be complicated and inefficient. Perhaps SEVNM program participation should initially be limited to facilities within the same LDC service territory, regardless of distance between the buildings. Future expansion of the program could possibly include facilities anywhere within Ontario, and credits applied across LDCs.*
- b. Within virtual net metering each of the different customers that is participating with a particular project should have the ability to be settled based on the rate class of their load account (i.e. the load account receiving the credits) rather than based on the rate class of the account where the generation is occurring, or the wholesale rate. For example, under a SEVNM framework, if a company owns a warehouse and generates electricity there, that warehouse might pay the Industry Rate Class A but its store location, where the credits are being transferred, might pay a higher electricity rate. The net metering customer should have the generation credited based on the rate class of the account receiving the credit. Under a MEVNM framework, a kWh generated by the system should translate into a credit at the retail rate for the customer's load account where the credit is being utilized.*

8) What kinds of MEVNM ownership models should be contemplated by Ontario's net metering framework (e.g. utility, private developer, not-for profit, co-operative, indigenous community or municipally-owned)?

- a. All the above should be contemplated to give the consumer choices*
- b. Competition will ensure lowest cost for consumers and would broaden public understanding and acceptance*

9) What kinds of physical configurations should be contemplated under Ontario's net metering framework for MEVNM projects (e.g. condominiums, apartments, neighbourhood co-operatives, municipal buildings, university or corporate campuses)?

- a. *In keeping with the intent of distributed generation that is utilized at the source, perhaps some sort of limitations should be placed on how far the MEVNM can be located from the participants condo / apartment or business. By example, the benefits to the grid are less certain if people living in Toronto are participating on a MEVNM project located outside Sudbury, especially, if the desire is to reduce/avoid the transmission of electricity and associated losses. Perhaps the simplest (if imperfect) solution would be to require that VNM generation and consumption occur within the same LDC territory.*

10) Are there specific costs your organization/community/industry would incur if virtual net metering models were to be required of LDCs under Ontario's net metering framework?

(please outline potential costs and mitigation strategies in as much detail as possible)

- a. *We expect that our LDC members may incur administrative burdens with increased numbers of participants in the NM program overall; however, it may be possible to reduce that burden if the third party – the net metering facility owner, most likely – could be the single point of contact for the LDC regarding the NM account billing, and could absorb some of the burden. This would require the SEVNM system owner to oversee the various accounts of a number of buildings; in a MEVNM system this could entail a condo or co-op overseeing a number of member accounts, which would be a considerable responsibility and could become a costly burden for the owning party. Enforcement regarding delinquent accounts could be a challenge also*
- b. *As an alternative to a. the ministry could consider working towards a billing model that allows for a fair distribution of the administration costs between the LDCs and the TPOs.*
- c. *We expect our members will need to provide considerable human resources to work with the MOE, LDCs and other bodies as the policies regarding billing and cost sharing are worked out. In the interests of ratepayer protection, the MOE and the Ontario Energy Board should seek to ensure that customers are not unnecessarily burdened with LDC administration costs or losses on their electricity bills.*

Additional Feedback

1) Please provide other topics or issues related to third-party ownership that you would like to bring to the attention of the Ministry of Energy, explaining why they are important to consider.

(Please use the following space to communicate any other input on third party ownership you may have.)

- a. *MOE may want to consider price adders as incentives (above TOU pricing) to encourage participation in grid constrained regions / municipalities. Increased uptake in the program could defer or eliminate requirements for additional grid infrastructure or upgrades. This would provide substantial savings to the Province and also help manage rate increases to the rate payer due to grid infrastructure projects.*

2) Please provide other topics or issues related to virtual net metering you would like to bring to the attention of the Ministry of Energy, explaining why they are important to consider.

(Please use the following space to communicate any other input on virtual net metering you may have.)

- a. *The OEB is currently considering the implementation of Distributed Energy Resource (DER) credits as a part of their consultation on rate design changes for commercial/industrial electricity customers. The fast switching capability of solar generation to react to disturbances in the electricity grid through their inverter connection allows DSG to provide a variety of services to distribution networks. Receiving DER credits would increase the adoption of solar generation by capturing revenue streams beyond simply avoided electricity consumption thereby reducing barriers to adoption. With the OEB considering DER credits as a part of rate design changes for distribution customers, the new net metering regime should consider how to provide compensation for DER credits, if they are implemented. One option to consider would be to set a fixed rate (either per connection or for excess energy) to reflect the DER credit value. The fixed rate could be set and changed as part of the rate filing of the LDC.*