

Ontario Net Metering/Self Consumption Summary Q&As

This document provides responses to questions posed during consultation and engagement on the Ministry of Energy's Net Metering/Self-Consumption (NM/SC) program concept proposal. This includes questions asked during the background webinar presented August 27, 2015. Many of these were also heard during the in-person sessions held between September 14 and October 1, 2015. For brevity, some questions have been edited or combined with others. If you feel your question has not been answered in this summary, please email: Feedback.to.CEE@Ontario.ca.

Existing Programs and Transitioning to the New Program

Net metering

Q. What is net metering? How does it work? How does it differ from self-consumption? How does it differ from microFIT/FIT?

Net metering is a billing arrangement that allows customers to generate renewable energy onsite for their own use, and to receive bill credits for any surplus electricity that they output to the electricity grid. The portion of the electricity that a customer consumes onsite is called "self-consumption."

microFIT and FIT are procurement programs which offer a standard price for electricity generated from renewable energy sources. In the FIT microFIT programs, 100% of electricity generated is sold to the grid – there is no self-consumption.

microFIT

Q. What will happen to existing microFIT contracts, will they be transitioned into the new NM/SC program or are they locked in for the 20 year contract period? Will someone already holding a microFIT contract be allowed to participate in the NM/SC program?

An existing microFIT contract would not be revoked as a result of the introduction of the successor net metering program. Upon expiration or termination of a microFIT contract, the proponent could apply to the NM/SC program; in this case, the proponent would be responsible for any required metering or connection changes.

Q. Is the resetting of credits completed on a rolling 11-month timeline? As in, in month 11 do you just reset month 1 to zero, or all 11 months are reset to zero?

Under the current net metering program, bill credits representing the dollar value of exports can be accrued, or "rolled over" to the next bill if they exceed the dollar value of the consumption

portion of the bill for that billing period. Credits can be carried forward for up to 11 months. We understand that some local distribution companies (LDCs) currently reset credits at the 12 month in-service anniversary of a net metering installation.

We are now considering feedback received on the treatment of credits. The treatment of credits has not yet been determined for the NM/SC program.

Q. Will existing net metering systems be compensated for the new adders, if included, in the new program? If not, will they be eligible to qualify for the new rates and /or moved to VOST?

We are exploring the option of allowing customers with an existing net metering agreement (i.e. applied under Ontario Net Metering Regulation 541/05) to have the option of maintaining their existing net metering agreement. However, no decisions have been made at this time. Net metering customers and LDCs can currently cancel an existing net metering agreement with 90 days written notice.

Pilot Projects

Q. Will the Ministry be considering pilot projects as part of this process?

The program concept proposal does not represent a fundamental change to the metering configuration of the existing net metering program. As a result, the Ministry has not identified the need for a pilot project at this time.

Conservation

Q. Is net metering considered conservation?

The portion of net-metered generation that is consumed behind the meter can be considered conservation, as it meets Ontario's current definition of Conservation and Demand Management: activities aimed at reducing the draw from the electricity grid, including small scale (i.e. <10 MW) behind the meter customer generation.

We are exploring this transition as a conservation initiative from the perspective of helping to match generation with local demand and reducing local load and related infrastructure needs.

Q. Would funding be available to help offset the capital costs required to participate in a Net Metering/Self-Consumption (NM/SC) arrangement under the Conservation First Framework? Can LDC's claim conservation credits from NM/SC project's towards their 2020 CDM targets?

The Ministry is now considering feedback we received on how net metering should interact with the 2015 to 2020 Conservation First Framework.

The Successor NM/SC Program

Proponent Eligibility:

Q. What are the rules surrounding ownership, multiple owners and third-parties? Is this still a program solely for residential or can small businesses participate as well?

Under the program concept proposal, all customers of an electricity distributor would be eligible to apply to participate in a NM/SC arrangement, with renewable energy projects of 10 kW and less, and provided all technical requirements are met. We are now considering feedback received on whether other participant arrangements should be enabled, such as community solar and virtual net metering, and the rationale and steps required for their inclusion.

Eligible Technologies:

Q. What technologies or generation types will be considered for net metered other than PV, if any? Would the Ministry of Energy ever consider residential co-generation (e.g. natural-gas fuelled Combined Heat and Power, or CHP) in the NM program?

We are now considering feedback received on which technologies should be eligible and why they should be considered.

The Ministry is exploring the transition of the existing microFIT program to a NM/SC program, consistent with the commitment made in the 2013 Long-Term Energy Plan. The program concept proposal has focused on solar generation given that 99.9% of microFIT projects have been solar PV.

Eligible Project Sizing:

Q. Will the program remain limited to 10kW and less such as the current microFIT program, and if so, why? Will you consider a strategy for deployments larger than 10 kW for commercial or industrial applications?

The 2013 LTEP committed to explore the transition of the microFIT program, under which only projects less than 10 kW (or “small scale”) in size are eligible, to net metering. That has informed the current focus of this proposal.

We are now considering feedback received on the consideration of larger project sizes.

Q. Any thoughts on the length of time to get an approval for a net metering project?

A guiding principle of the program concept proposal is that the process for eligible customers to participate in the program would be streamlined, and we are now considering feedback received on how to achieve this. A specific application process is not defined at this stage; any changes

to the current application process and streamlining opportunities would require consideration during the implementation phase.

Q. Will the OEB Distribution System Code's 1% limit on net metering capacity be reviewed?

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 be able to remove the current restrictions on net metering and customer-owned renewable generation.

Q. Is there a thought to having Hydro One review their connectivity model (i.e. 7% rule)?

Hydro One commissioned a study by Kinectrics of its connection thresholds and rules (ie. "7% rule") to ensure they are at appropriate levels to maintain safety and reliability 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; however, Hydro One is open to the possibility that the 7% rule could be revised in the future, based on potential changes to system operating practices and protection practices, and further research and testing from the electric power industry.

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.

Q. How will net metering and self-consumption system be treated differently according to this new concept?

Under the current Net Metering Regulation, net metering customers are compensated for grid exports through electricity bill credits that are valued at retail electricity rates. So, whatever volumetric charges a customer pays for the electricity that they take from the grid, they are credited at the same rate for the electricity they send to the grid.

Under the current regulation, those exports are valued at retail electricity rates. Retail electricity rates typically represent 'sunk' costs or investments already made in the electricity system.

The NM/SC program concept proposal would not change the customer's ability to offset grid electricity purchases through self-consumption of generated electricity, but it could change how the credits for net grid exports are valued. Under the NM/SC program concept proposal, those

exports credits could be based on an estimate of the locational system value to the electricity grid, including its ability to defer or avoid future investments in the electricity system.

Q. Can you please outline the proposed commencement date of the new NM/SC program?

This transition is anticipated to be implemented in late 2017 or early 2018. As outlined in the 2013 LTEP, microFIT procurements continue to the end of 2017.

Q: What will be the approach with off-grid First Nations communities in Ontario?

At this time, we remain 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.

Currently, off-grid communities serviced by Hydro One Remote Communities Inc., a subsidiary of Hydro One, may be eligible to participate in the Renewable Energy INnovation DiEsel Emission Reduction (REINDEER) program, which enables the connection of renewable energy projects to reduce the impact of diesel use on the environment. For more information about the REINDEER program, visit the Hydro One website at: www.hydroone.com.

Energy Storage

Q. Where do you see the net metering option going in the future in relation to personal storage? As an example, allowing people to store power for their own use as well as releasing the power to the grid when in surplus? Will energy storage be regulated under this program?

No decisions have been made regarding compensation for energy storage in a future net metering program.

We are now considering the feedback we received on the value of including energy storage, including comments on specific costs and benefits that should be considered, and on whether there are barriers (technical or regulatory) preventing the installation of energy storage coupled with renewable behind the meter generation.

Q. Have there been any programs under review by the Ministry that addresses both energy storage and Time of Use Rates?

See above answer. In addition, we are now considering feedback received on the benefits and costs of transitioning to Time of Use rates for net metering customers.

Value-Based Compensation

Q. If the intent of the program is to provide a ‘break even’ offer, what is the incentive to the general public interested in the program? Are you considering offering any rebates/incentives on the net metering systems?

The intention is to align compensation with the value net metering provides to Ontario’s electricity system, as well as to fairly allocate costs and benefits among all ratepayers. We are now considering feedback received on any transitional mechanisms that might be required to evolve to this new approach.

Q. If value based compensation varied year to year, how would one develop a business case for implementing small-scale renewables under a value-based compensation approach? Would people be able to get long-term commitments on VOST and/or NM contract to assist with acquiring financing for projects? Are any other jurisdictions doing this?

The Ministry is now considering feedback received on how often values should be recalculated to reflect updated system needs and whether these new values should apply to all generators installed under the successor NM/SC program or new installations only.

In terms of other jurisdictions, Austin, Texas has introduced a VOST which it updates annually and applies to all customers operating under the VOST. Other jurisdictions have proposed frameworks which propose fixed-price contracts over several years.

(see: Austin Energy, “Residential Solar Energy Rate” webpage, navigated to from: <http://austinenergy.com/>; and State of Maine, “White Paper: A Ratepayer Focused Strategy for Distributed Solar in Maine,” at:

[“http://www.maine.gov/meopa/news/Maine%20VOS%20White%20Paper%20V2%202.pdf”](http://www.maine.gov/meopa/news/Maine%20VOS%20White%20Paper%20V2%202.pdf)).

Q. Can you provide examples of obvious places for locational adders in Ontario?

Locational adders could assist in targeting solar PV or other resources to areas where they could provide the most value to the electricity system. These would be areas with infrastructure needs, and where distributed resources could defer or avoid capital expenditures that would otherwise be required to alleviate constraints, replace aging equipment, or improve reliability. Value would be higher where the generation profile aligns with local peak. Integration with other resources (e.g. conservation, demand response, or storage) may also increase the value of distributed energy resources.

Information on Ontario’s Regional Planning Process and identified needs for regions for which regional electricity planning is underway is available on the IESO webpage at the following link: <http://www.ieso.ca/Pages/Participate/Regional-Planning/default.aspx>.

Q. Who sets the price for value based compensation and is there a governance or oversight structure?

The proposed governance of the program includes the IESO, through a stakeholder engagement process, developing and maintaining a methodology for calculating province-wide and regional values. LDCs could credit generators for local Distribution (Dx) benefits, applied for as part of LDCs' regular Dx rate application process. It is proposed that LDCs would lead in program delivery, with IESO and OEB support as appropriate.

Q. What is the expected rate for the VOST or locational adder? Will the VOST be higher or lower than the retail rate? Do you have a sample VOST or locational adder for Ontario?

The expected rate or rates for VOST or locational adder is not available at this stage. This consultation and engagement process is meant to work through the first two steps required to develop a VOST or locational adder: to identify the components to include and over what time period values will be calculated.

If a decision is made to proceed with a VOST or locational adder, the next step would be to determine the technical methodologies for valuation through an open and transparent engagement process. This would be the focus of a subsequent engagement led by the IESO.

Q. As the new NM/SC program evolves, will a location specific map be available relating to valuation of solar?

The purpose of this consultation and engagement process is to seek feedback on an appropriate compensation structure and which components should be considered. Resources such as the described map would be developed as part of a subsequent implementation. We appreciate the suggestion at this stage, and have been open to feedback on how to streamline participation in the new program.