Ontario

LEGISLATION AND REGULATIONS COMMITTEE BRIEFING NOTE

Energy
Updating Net Metering Program

JEP Nov 6, 2013 (LTEP)	Cab Nov 11, 2013 (LTEP)	Cab Feb 18, 2015 (LTEP update)	MTCC Aug 24, 2016 (Conservation update)	LRC and LRC/Cab January 31, 2017	Effective Date July 1, 2017

Summary of Proposal

The following proposal contains no variances from current government direction.

Context

Since 2005, Ontario's Net Metering program has enabled consumers to generate renewable energy to offset their own energy requirements and receive bill credits for any surplus energy sent to the grid. In 2009, Ontario introduced Feed In Tariff (FIT) and microFIT programs under which 100% of generated electricity is exported to the grid and generators are compensated at a specified rate of return. Uptake of the Net Metering program has been limited since the launch of the FIT programs.

Ontario's 2013 LTEP committed to examining the potential for microFIT to transition from a generating purchasing program to a net metering program and identified the opportunity to expand and enhance the Net Metering program. The microFIT program will accept applications until December 31, 2017, and the final FIT application window was held in fall 2016. Implementation of the proposed updated Net Metering program would coincide with the winding down of the FIT and microFIT programs.

The Proposal

The proposed amendments to the Net Metering regulation (Ontario Regulation 541/05) would broaden Net Metering program eligibility and make additional updates to:

- Clarify the description of the method used to calculate bill credits for any surplus electricity sent to the electricity grid;
- Extend the carryover period from 11 to 12 months for bill credits for any surplus electricity sent to the grid;
- Remove the 500 kilowatt (kW) project capacity size limit to allow for any sized renewable energy generation system, subject to the system being used primarily for the generator's own use;

- Allow for the use of energy storage and its recognition for the purposes of the Net Metering program; and
- Allow participants with existing Net Metering program agreements (prior to the effective date of the proposed updated Regulation) the option of entering into new agreements which reflect the updated provisions of the Regulation, or of maintaining their existing agreements.

The proposed amendments are intended to provide increased opportunities for Ontarians to generate renewable energy onsite to meet their own energy needs and to help homes and businesses transition to a low-carbon economy. Renewable energy industry stakeholders have requested implementation of the updated program by July 2017, in advance of microFIT and FIT programs ending. This would ensure a smooth transition between programs and provide business continuity for the renewable energy industry.

This proposal includes consequential amendments from the Ministry of Finance to the definition of a net metered generation facility in Ontario Regulation 493/01 Debt Retirement Charge (DRC) – Rates and Exemptions. The regulation defines a 'net metered generation facility' as having "a maximum cumulative output capacity of not more than 500 kilowatts." The proposed amendments will strike the capacity limit from the definition and enable larger generating facilities to be eligible for the Net Metering program and qualify for the DRC exemption, beginning July 1, 2017. This would sustain the exemption, in place since 2005, for all net metered generators from having to pay DRC on the portion of self-generated electricity that they self-consume.

Why does Ontario need these changes? Why now?

In addition implementing the updated program in advance of microFIT and FIT programs ending, the proposed amendments respond to customer feedback on the program, primarily the inability to carry bill credits forward for a full 12-month period in certain distributor service areas. There is currently varying treatment of bill credits across distributors, and the proposed amendments would clarify a full 12-month carryover period.

What is the expected cost to government?

There is no additional cost to government associated with this proposal.

The costs for electricity distributors to administer the Net Metering program are recovered from ratepayers, through electricity rates approved by the OEB. There are a number of factors that would affect uptake of the program so the exact cost to ratepayers is not known at this time; however, the estimated maximum is $1.65 million/year over the next three years. This would mean a maximum increase of 11 cents to an average residential household/year in 2020, or approximately one cent per month.

There is a small amount foregone DRC revenue associated with the Ministry of Finance amendment (estimated at $2,700 and $24,000 – over the 2017-18 fiscal year only). For comparison, annualized DRC revenues in the fiscal plan are about $625 million. Given the small impact, this qualifies under the Treasury Board Delegation process instead of a formal TB/MBC approval process for the LRC submission.

What are the key steps to deliver this proposal?

Net metering program enhancements are proposed in two phases, with this proposal as the first phase. If this proposal is approved, electricity distributors would be responsible for implementing the updates, with regulatory oversight from the Ontario Energy Board (OEB), and the Net Metering program updates would be in place by July 1, 2017.

The Ministry of Energy is currently consulting with stakeholders on a potential second phase of enhancements that could be brought forward in the spring of 2017 and in place in 2018. The second phase could include legislative proposals or more administratively complex enhancements (that would require more work with LDCs and other stakeholders).

How will the changes be communicated?

The Ministry would post a Decision Notice to the Environmental and Regulatory registries, and send a notification email to its stakeholder list (approximately 500 industry, distributor and other stakeholders). It is expected that industry associations (e.g. Canadian Solar Industries Association) would recirculate the notification to members.

The Ontario Energy Board would also post updates to its website and notify stakeholders via email.

Terms you need to know

- **Net Metering** – A billing arrangement that allows customers to generate renewable energy onsite for their own use, and receive bill credits for any surplus electricity sent to the grid.
- **FIT (Feed-in Tarrif) program –** a generation purchasing program for renewable energy generation facilities up to 500 kilowatts (kW). The program provides a guaranteed price for 100% of electricity provided to the grid over a 20-year contract term.
- **microFIT program –** a stream of the FIT program that is designed specifically for homeowners and other eligible participants to install projects 10kW and less in size.
- **Ontario Energy Board (OEB) –** A Crown agency that regulates Ontario's electricity and natural gas sectors in the public interest (implements processes to allow stakeholders to comment on various applications needing approvals,

including local distribution company rate applications)

- **Local Distribution Companies (LDCs) –** Local electricity utilities, responsible for distributing power from transmission lines to people's homes (e.g., Hydro Ottawa, Toronto Hydro, etc.).

Cabinet Office Analysis

The proposal contains no variances from current government direction.

The proposal is responsive to the 2013 LTEP and is intended to provide increased opportunities for Ontarians to generate renewable energy onsite to meet their own energy needs. Ontario has had a Net Metering program in place since 2005 and all electricity distributors are required to offer net metering to customers on request.
It is anticipated that the proposal will benefit the electricity system and ratepayers by providing incremental new clean and renewable electricity, deferring or avoiding more expensive electricity investments, and enabling grid reliability and other operational services through the use of energy storage. The proposal also supports initiatives under the Government's 2016-2020 Climate Change Action Plan (CCAP), including broadening eligibility and removing barriers to new technologies to help Ontario homes and businesses transition to a low-carbon economy.

Anticipated outcomes are that:

- increasing the period that customers can carryover Net Metering program bill credits for any surplus electricity sent to the grid from 11 to 12 months would support homeowners in achieving near net zero and net zero energy homes and buildings. This extension is important as a Net Zero Energy building is defined as a building that produces "at least as much energy as it consumes on an *annual basis*."
- Removing the 500 kW project capacity size limit would allow larger commercial, institutional and industrial customers to meet their annual electricity demands with renewable energy by participating in the Net Metering program. These larger customers tend to self-consume a higher proportion of generated electricity than residential customers due to higher daytime (peak time) electricity usage. This would increase generation close to load and reduce strain on the electricity system.
- Enabling customers to pair energy storage systems with renewable energy systems would allow customers to store electricity from the renewable energy generation facility and from the distribution system, and send any excess electricity to the distribution system. Energy storage options can encourage customers to shift their demand to off-peak periods, and can benefit the electricity system by reducing grid demand during peak periods.

Increased renewable energy under the Net Metering program also has a number of additional benefits that align with the goals of Ontario's Climate Change Action Plan and the transition to a low-carbon economy, including direct and measurable Greenhouse Gas emissions.

The renewable energy industry is keen to see the entire suite of program updates. With this phased approach, certain elements that are of interest to stakeholders are not included in this initial phase. The following concepts will be considered in the second phase, targeting implementation in 2018 :

- a cost-benefit study of province-wide implementation of time-of-use (TOU) billing for residential and small business customers: The Ministry of Energy is initiating a cost-benefit analysis in spring 2017 to understand the scope of these investments, and determine if there would be ratepayer value for these investments.
- enabling virtual net metering for single and multiple entities: The Ministry initiated additional consultation on this proposal in January 2017 in response to concerns from electricity distributors related to implementation and administration of virtual net metering projects. Enabling virtual net metering among multiple entities would require legislative amendments.
- enabling third party ownership: Similar to multiple-entity virtual net metering, the Ministry identified the need for further study and consultation – to address consumer protection issues, as well as distributor implementation – and began this in January 2017 (concurrent with virtual net metering consultations). Enabling third-party ownership would require legislative amendments.

Twenty-five remote First Nation communities and six other remote communities are served by local diesel generation operated by distributors that are currently exempt from offering the regulated Net Metering program. These distributors include Hydro One Remote Communities Inc. (HORCI) and 10 Independent Power Authorities. These distributors are currently exempt from the requirement to provide the Net Metering program because, in the case of the Independent Power Authorities, they are under the jurisdiction of the federal government (not licenced or regulated by the Ontario Energy Board). In the case of HORCI, net metering has unique technical and cost considerations for remote community operation. The electricity rate paid by residential customers served by HORCI is heavily subsidized by the Rural or Remote Electricity Rate Protection program and does not reflect the actual cost of service or form an appropriate basis for net metering. As a result of these unique circumstances, the ministry proposes to continue exempting these distributors from the Net Metering program requirement.

Linkages:

- **2013 Long Term Energy Plan –** committed to examining the potential for microFIT to transition from a generation purchasing program to a Net Metering program. A new Long Term Energy Plan will be released in spring 2017, exact timing still to be confirmed.
- **Climate Change Action Plan (CCAP)** – outlined incentives and rebates for homes and businesses to install low carbon-technology and work towards net zero

emissions. A Net metering program can assist in developing net-zero building and communities by allowing customers to generate clean electricity onsite, while maintaining access to a reliable electricity supply.
- **Clean Tech Sector Strategy** - As Ontario develops a clean tech strategy, this regulatory change can contribute to the continued expansion of the clean tech sector, particularly those companies that provide renewable energy and energy storage solutions to emitters.

Other Jurisdictions:

Net metering is a common program in North America. 41 U.S. states and all Canadian provinces and territories offer Net Metering programs. Net metering approaches continue to evolve in response to concerns that net-metered customers do not pay their fair ‘cost of service’, shifting costs to other consumers (some US utilities continue to propose or implement increased fixed charges, minimum bills or new charges on solar customers – in 2015 61 utilities in 30 states proposed increasing charges for all residential customers).

Delivery:

The Ontario Energy Board will provide regulatory oversight of electricity distributors’ implementation of the proposal through its overall supervising and licensing authority, rate making functions and hearings processes.

The enforcement mechanism for electricity distributors to offer Net Metering programs is a distributor licence condition requirement, overseen by the Ontario Energy Board. Electricity distributors are required to report their performance annually through a ‘performance scorecard,’ prepared and overseen by the OEB.

Stakeholder response:

The Ministry of Energy consulted in summer and fall 2015, developed the program proposal, and posted the proposal on the Environmental and Regulatory Registries in August 2016. They received 33 responses from the Registries (primarily renewable energy and storage industry and associations, and electricity distributors) and overall there was support for the proposed regulatory amendments. The ministry also sought guidance and input from an Advisory Working Group, composed of representatives from the renewable energy industry, electricity distributors, the Ontario Energy Board and the Independent Electricity System Operator.
- The general public and Indigenous communities are expected to broadly support the proposed program updates, and the associated ratepayer savings from the wind down of the microFIT and FIT programs.
- Prospective and new program participants are expected support the proposal because of increased opportunities to generate and self-consume renewable energy.

- Electricity Distributors are expected to support the proposal and may see higher administration costs from an increased volume of net metering accounts. The Distributors would be protected from lost revenues by the OEB's decision to move to a fully fixed residential rate design. The OEB has postponed a decision on Commercial and Industrial rate design to be able to consider the final Net Metering program regulatory updates, if passed. That process is also intended to address distributor rate protection concerns associated with increased uptake of the program. The Electricity Distributors Association and other distributors asked for more time/analysis of more substantive program elements and in response the Ministry decided to undertake further consultation on these program elements.
- The renewable energy industry is expected to support the proposal because of the proposed removal of the 500 kW size limit and removal of the regulatory barrier to energy storage. Industry is expected to be keenly interested in virtual net metering and third-party ownership models, which offer the potential for increased participation.

The Ministry of Finance posted the consequential amendment on December 7th, 2016 for 30 days with 0 responses.

Risks:

- Stakeholder/ratepayer cost risk: compensation sent to the electricity grid may provide a small subsidy to generators in certain areas of the province, which may result in cost-shifting to other electricity consumers (who will pay for the subsidy through their rates). This modest subsidy already exists under the current program. The Ministry of Energy has not heard concerns about this matter, however they will undertake a cost-benefit analysis of the program every three years in order to monitor the results.
- Implementation risk: electricity distributors would be unable to implement all updates by the proposed in-force date of July 1, 2017. The ministry estimates this risk to be moderate to low. The ministry's mitigation plan is to continue the OEB practice of allowing limited exceptions and remedy periods during which the OEB works with distributors as they aim towards compliance.