



# CanSIA

CANADIAN SOLAR  
INDUSTRIES  
ASSOCIATION

L'ASSOCIATION DES  
INDUSTRIES SOLAIRES  
DU CANADA

## **FIT**

# **Procurement Proposal**

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[www.cansia.ca](http://www.cansia.ca)

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## Introduction

CanSIA is a national trade association that represents the solar energy industry throughout Canada. CanSIA's vision for Canada's solar energy industry is for solar electricity to be a mainstream energy source and an integral part of Canada's diversified electricity mix by 2020. CanSIA is also targeting the solar electricity industry to be sustainable, with no direct subsidies, and operating in a supportive and stable policy and regulatory environment within a similar time frame.

This document was developed by CanSIA's FIT Procurement Proposal Forum and includes input from CanSIA's general membership. The FIT Procurement Proposal Forum is a group of CanSIA members with an interest in the FIT Program who have volunteered their time and resources toward the development of this proposal. This proposal presents CanSIA's position on suggested changes to the FIT Rules, Contract, and overall procurement process. These suggested changes are designed to revise procurement activities under the FIT Program to provide certainty of timelines and program parameters to best enable efficient and cost effective project development, and to align with business practices that would exist under a net metering framework. CanSIA believes that the central policy drivers for the next two rounds of FIT procurement should be simplicity/efficiency of administration, project cost reduction, and alignment with future net metering programs.

This document also includes a high-level overview of the recommendations of CanSIA's Distributed Generation Task Force (DGTF) including both an assessment of the current progress of the solar industry towards viability under a net metering framework, as well as commentary on how to help ensure that viability is achieved as quickly as possible. The recommendations of the DGTF are included within this proposal to demonstrate the necessity of committing to the already directed next two rounds of FIT procurement (FIT 5 and FIT 6). The full DGTF Recommendations Report will be delivered to the Ministry of Energy, Independent Electricity System Operator (IESO) and other stakeholders upon completion.

## Facilitating the Transition to Net Metering

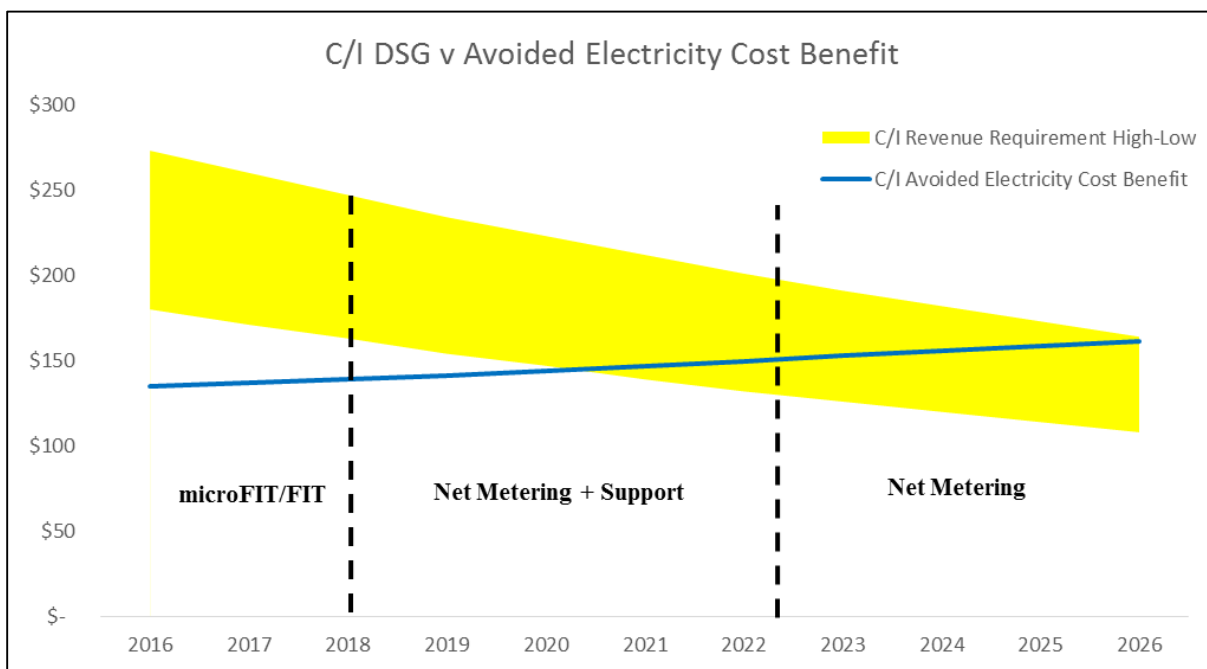
Distributed Solar Generation (DSG) provides value and benefits to the Ontario electricity system. DSG located behind the meter is an effective Conservation and Demand Management measure which can act as an important tool for LDCs in meeting their CDM targets. From a provincial perspective, regional planning and distribution system planning benefit from having DSG as a grid-responsive and flexible resource option to meet power system needs. DSG also offers a supply mix diversification option that reduces peaking natural gas consumption in support of Ontario's climate change objectives as detailed in the proposed *Climate Change Mitigation and Low Carbon Economy Act*. DSG also allows municipalities, community groups and Aboriginals to capture new revenue streams and meet their own climate change objectives. DSG can contribute to smart land use planning policy by moving electricity generation onto roofs or onto properties already being used for another purpose to align generation with load. At the individual and commercial level, DSG provides consumers an investment option to hedge against the risk of rising electricity rates.

There is a large demand for medium sized projects in Ontario, as evidenced by the high application rates to the FIT Program, and CanSIA is committed to ensuring that the solar industry is able to continue to meet this demand. Further, CanSIA is committed to ensuring the province is able to realize the benefits described above to the fullest and collect on the investment that has been made in the solar industry since 2009. In order to accomplish these goals

and facilitate a transition from the standard offer procurement model that is feasible and achievable for industry, the transition must address the current regulatory and technical barriers which limit the net metering approach today.

In order to accomplish this transition, a number of regulatory and infrastructure upgrades (such as upgrades to the Meter Data Management and Repository system) must be made. The industry must also reach a point at which the costs of project development (and thus the associated revenue requirement of a project) intersects with the revenue available from offsetting electricity consumption for a customer. The point at which this intersection occurs is highly dependent on the regulatory and infrastructure upgrades mentioned above, but also market factors including project cost digression. Due to the potential impact of these factors, the chart below illustrates the intersection of these two variables within a range for commercial/industrial sized solar systems – this range and the intersection point can shift depending on the transition approach adopted.

**Figure 1: DSG Revenue Requirement vs Avoided Electricity Cost Benefit**



### Regulatory and IT Infrastructure Upgrades Required

As discussed above, in order to transition the solar industry to net metering viably, certain regulatory and infrastructure upgrades are required:

1. Ensuring the net metering regulation (O. Reg. 327/09) continues to allow netting to occur over the course of a billing period rather than instantaneously.
2. Ensure that credits accrued to a generator based on exporting more energy than is consumed during a billing period are permitted to “roll over” into subsequent billing periods. This will allow generators to be compensated fairly for generation at the time it is produced and to offset periods of high generation and low electricity consumption with periods of low generation and high electricity consumption.

3. Eligible customers must be able to utilize Time of Use Rates to calculate the value of their generated energy. Customers currently can only calculate the value of their generated energy using tiered rates due to technical limitations of the Meter Data Management and Repository (MDMR) system and LDC IT infrastructure. Tiered rates not accurately reflect the value of electricity injected (or consumed) during those periods.
4. Enabling the MDMR to intake generation data at Time of Use rates is currently being examined by the Ministry of Energy's Net Metering/Self-Consumption Advisory Working Group (AWG). This change, if pursued, is not expected to be implementable for 1.5 – 2 years meaning that one of the underpinnings of a successful transition to net metering will not be available in the immediate future.
5. The conclusion of the IESO's Foundation Project (which will facilitate third party access to aggregate customer consumption data) would also be beneficial in advance of any transition to a net metering framework. Access to this data would allow solar system providers to perform cash flow analysis and determine the business case for particular customer classes. Access to this type of data at the aggregate level is currently limited to LDCs.
6. LDC billing systems and practices would also need to be upgraded in advance of a transition to net metering to allow them to capture all required information and present that information to customers. This change has been identified by the AWG as requiring input and efforts from LDCs as well as the OEB.

### Transition Period Post 2017

1. Beyond required regulatory and infrastructure upgrades, solar project development costs must decline further.
2. Given current project development costs, assumed future development costs, and assumptions on the revenue available from net metering, CanSIA has determined that there will be a difference between the revenue required to make a project economically viable and the revenue available from net metering will exist after the conclusion of FIT in 2017/2018. Due to this, a moderate level of support (from existing committed funds such as CDM or through future proceeds of Cap and Trade) will be required during the period after the FIT Program ends before viability under net metering becomes an economic choice for customers. CanSIA's DGTF assumes this could be a 3 – 5 year period depending on changes to the regulatory framework.
3. The majority of revenue under net metering comes from avoided consumption, so support will be significantly lower compared to the FIT program.
4. An updated net metering approach and streamlined processes can be designed and implemented in 2016/17 while the next two rounds of FIT (FIT 5 and FIT 6) are procured.
5. CanSIA's DGTF Recommendations Report further specifies the extent and timing of the support required as well as provides recommendations on how that support could be administered in order to ensure effectiveness for industry and to limit any further ratepayer impacts by making use of already committed funding.

## FIT 5 / FIT 6 Procurement Commitment and Recommended Program Changes

The solar industry benefited from the introduction of the FIT Program starting in 2009 and the policy stability that was provided in the Minister's Directive in 2013 for the procurement of 900 MW of FIT between 2013 and 2018. The next directed rounds of the FIT Program (FIT 5 and FIT 6) will provide certainty for investment and help to manage the continued reduction in project development costs. Running these two rounds as planned will also allow time for the eventual transition to a net metering based program to be developed and implemented. CanSIA recommends maintaining the key aspects of the current FIT Program, with minor enhancements, that will position the industry along a more customer based model that aligns more closely with net metering and reduces project development costs. These changes are described below.

### Procurement Schedule

**The Ministry of Energy and IESO should implement CanSIA's proposed Procurement Schedule to provide early and forward notice of upcoming procurement activities**

CanSIA proposes the following Procurement Schedule for the next two rounds of FIT procurement. The proposed Procurement Schedule assumes that no (or only administrative) changes would be made between the conclusion of FIT 5 and the initiation of FIT 6. The proposed Procurement Schedule also assumes that CanSIA's recommendation on implementing pre-set Contract Price digression is adopted (see below). If this recommendation is not adopted, the updated Price Schedule should still be released simultaneously with final program documents and the Price Review should be initiated far enough in advance of that date to allow the IESO to complete review accordingly.

**Table 1: 2016/2017 FIT Procurement Schedule**

Date	Activity
March 15, 2016	CanSIA FIT Procurement Proposal submitted to Ministry of Energy and IESO
June, 2016	IESO posts FIT 4 Contract Offer List
July, 2016	IESO posts draft FIT 5 Program Documents for stakeholder comment and applicable Price Schedule
August, 2016	IESO posts final FIT 5 Program Documents
October, 2016	IESO opens FIT 5 Application Period
Q2, 2017	IESO posts FIT 5 Contract Offer List
Q2, 2017	IESO opens FIT 6 Application Period
Q4, 2017	IESO posts FIT 6 Contract Offer List

## Setting Contract Price

### **The Ministry of Energy and IESO should implement pre-set Contract Price digression of 5% for Solar PV for each of the next two rounds of FIT procurement**

1. Implementing a pre-set, targeted, reduction to the Price Schedule for solar would give Applicants advance knowledge of the expected digression and remove the need to run full-scale Price Reviews each time a new round of procurement is launched.
2. CanSIA's Distributed Generation Task Force has targeted a 5% annual reduction in solar project development costs between now and 2022 based on forecasts from the following groups:
  - a. NREL projects 0.4 - 4.7% annual system cost decline 2014-2025
  - b. IEA projects 4.2% annual system cost decline 2015-2020
  - c. Green Tech Media Research projects 5.6% annual module cost decline 2012-2017
  - d. Tracking the Sun VIII – LBNL Sunshot (expects a 9% 2015 reduction)
  - e. ITNPV projects 3.5% average annual system cost decline 2015-2025

A similar pre-set reduction amount of 5% is recommended for implementation in FIT for each of the next two rounds of procurement.

3. The IESO could conduct a reasonability check based on available information to determine whether the pre-set 5% reduction amount remained valid and would maintain the ability to modify the Price Schedule based on the results of their analysis.

## Price Schedule Applicability and Visibility

### **The Ministry of Energy and IESO should ensure that Price Schedules apply to a round of procurement, rather than a calendar year, and that the applicable Price Schedule is made publically available as early as possible**

1. The Price Schedule should be established as early as possible in advance of the opening of an Application Period to give Applicants sufficient time to determine their level of participation, to determine which projects should be pursued given the applicable price, and to determine what level of Price Reduction can be feasibly pursued.
2. A Price Schedule should be tied to a round of procurement rather than a calendar year to give certainty on the Contract Price that will be applicable for a particular Application Period.
3. A large portion of the negative reaction from Applicants during the FIT 4 Application Period was due to the timing of the release of the 2016 Price Schedule. The Price Schedule was released approximately 2 weeks before the Application Period opened, after Applicants had spent their pre-development dollars for projects. Given the severity of the price digression, the Price Schedule should have been communicated to Applicants much earlier to enable them to develop only projects that were feasible at the applicable.

## Contract Capacity Set-Asides

### The Ministry of Energy and IESO should reduce the portion of future FIT Procurement Targets that are apportioned to Contract Capacity Set-Asides

1. The amount of MW apportioned to Contract Capacity Set-Asides (CCSAs) should be reduced from the current 2/3<sup>rd</sup> to a maximum of 1/3<sup>rd</sup>. The majority of the Procurement Target should be available to all Applicants regardless of whether they are a Participation Project or not.
2. CCSAs bring additional costs related to legal and financial structuring of the project.
3. The presence of CCSAs in the procurement necessitates the inclusion of strict post-Contract Supplier Events of Default that add financial risk to Participation Projects which can increase legal and financial costs. CCSA projects thus also can present a barrier to maximizing the value of a FIT Contract for developers and long term asset owners who are faced with those increased costs.
4. Incorporating a competitive advantage for projects whose nature carries increased costs goes in opposition to the policy intent of using the FIT Program to transition to a net metering framework and reducing costs. Any net metering program implemented in Ontario after the conclusion of the FIT Program is not likely to differentiate between the types of entities participating.
5. Recognizing that these groups have contributed to the achievement of provincial social and economic goals, CanSIA encourages the continuation of other support mechanisms that support municipal, community and Aboriginal projects including the Price Adders and programs/initiatives under the forthcoming successor program to the Aboriginal Renewable Energy Fund (AREF), the Community Energy Partnerships Program (CEPP), and the Municipal and Public Sector Energy Partnerships Program (MPSEPP).

## In-Series Metering

### As previously proposed by the IESO in their 2014 microFIT Enhancements Discussion Paper, revise the FIT Rules and Contract to permit in-series metering configurations

1. Systems connected in-series are typically less costly to install compared to systems that are connected in parallel or directly connected to the grid. This connection is generally simpler, as it may not require the load customer to be disconnected from the distribution system while the project is connected.
2. This type of connection configuration was originally permitted under the FIT Program but was prohibited when Measurement Canada highlighted concerns regarding the accuracy of settlement calculations. Subsequent proposals submitted to Measurement Canada by the IESO were found capable of complying with the statutory requirements for trade measurement accuracy. With the Measurement Canada objection effectively relieved, the IESO should be permitted to re-introduce in-series metering as an eligible connection configuration. As in-series metering connection configurations were originally permitted under the microFIT and FIT Program it was a configuration which LDCs permitted, installed, and settled. Due to this, there should be no concern regarding LDCs ability to facilitate connections of this type.



## Conclusion and Summary of Recommendations

Distributed Solar Generation provides a number of benefits to the electricity system. Capturing these benefits in earnest occurs when a grid parity situation is reached under a net metering framework. CanSIA sees this intersection point coming soon, however, when it occurs is heavily dependent on a number of factors including the completion of regulatory and infrastructure upgrades and project cost digression. Making the necessary changes to the regulatory framework and operational infrastructure of LDCs and the IESO takes time and it is not expected that the full raft of necessary changes could be completed before the 2017/2018 time frame. In that period, it is important that the Ministry of Energy and IESO continue to procure under the FIT Program and make changes to that program that will facilitate lower cost project development.

Specifically, CanSIA recommends the Ministry of Energy and IESO:

1. The Ministry of Energy and IESO should implement CanSIA's proposed Procurement Schedule to provide early and forward notice of upcoming procurement activities
2. The Ministry of Energy and IESO should implement pre-set Contract Price digression of 5% for Solar PV for each of the next two rounds of FIT procurement
3. The Ministry of Energy and IESO should ensure that Price Schedules apply to a round of procurement, rather than a calendar year, and that the applicable Price Schedule is made publically available as early as possible
4. The Ministry of Energy and IESO should reduce the portion of future FIT Procurement Targets that are apportioned to Contract Capacity Set-Asides
5. As previously proposed by the IESO in their 2014 microFIT Enhancements Discussion Paper, revise the FIT Rules and Contract to permit in-series metering configurations
6. CanSIA further recommends that the Ministry of Energy maintain their commitment to run the final two rounds of FIT procurement in 2016 and 2017 as outlined in the LTEP and continue engagement with industry, the OEB, the IESO, and LDCs to ensure that the successor net metering program for medium sized projects is structured appropriately. The creation of a successful net metering framework will need technical action and key stakeholder coordination which will require time for consultation and analysis before being launched.

Sincerely,



John Arthur Gorman  
President, CanSIA

## Appendices

### Appendix 1: FIT Procurement Proposal Forum Participants

1. Ontario Power Generation
2. Torys LLP
3. PowerStream Inc.
4. Sussex Strategy Group
5. City of Toronto
6. Horizon Energy Solutions

### Appendix 2: Non-Priority Recommended Changes to FIT Program

CanSIA supports the following two recommended changes to the FIT Program from a policy perspective. If these changes would be implementable while keeping to the timelines detailed in the proposed 2016/2016 FIT Procurement Schedule (above), CanSIA would support their inclusion. In the event that timelines would be significantly impacted, CanSIA would not recommend sacrificing an efficient resumption of procurement to include these changes.

#### Priority Point for Projects that are Sited Close to Load

1. The Ministry of Energy and the IESO could consider adding a new Priority Point for projects that are located on the same property as an existing or new load account. This would be a relatively simple way to encourage siting projects close to load that would require very little additional work for the IESO to integrate into the existing Application review process.
2. Prioritizing projects that are located close to load supports the policy intent of using the FIT Program to transition to a net metering framework. Prioritizing projects that are close to load would also incentivize projects that would experience less line losses and cause fewer issues on feeders with low loads.

#### Further differentiate Price Reduction Priority Points

1. The FIT Rules could be revised to create additional tiers of Price Reduction between the current tiers (i.e. a greater number of tiers between the 4% – 12% range) to allow for greater differentiation of Applications based on Contract Price. These additional tiers would correspond to an associated differentiated Priority Point score.
2. Current Price Reduction Priority Points have only three levels which does not differentiate drastically between Applications causing increased reliance on time stamp to determine the order of connection testing.