



25 January 2013

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge St., Suite 2700
Toronto, ON, M4P 1E4

RE: EB-2012-0246 Policy Review of Micro-Embedded Generation Connection Issues
Response to the Board letter dated December 20 2012

EB-2012-0246

Comments on the Board Staff discussion paper – issues related to the connection of micro-embedded generation facilities.

I am pleased to provide these comments on the Board Staff discussion paper.

At this time, I am not representing any clients, either LDCs or generators, thus my feedback attempts to provide a balanced perspective based on my experience in working at the Ministry of Energy, the Ontario Energy Board, the Ontario Power Authority and in working with the multitude of stakeholders in the development and implementation of the Renewable Energy Standard Offer Program, and the Feed-in Tariff Program and microFIT program in Ontario.

My first comment is that I find the matter difficult to provide meaningful guidance on the issues at hand, without having done a reasonable background review of precedents in other jurisdictions that have gone through the growth pains that we are experiencing in Ontario. The states of California, New Jersey and Arizona have the greatest amount solar energy installed¹, and a discussion of the issues at hand in Ontario would benefit from a summary of “best practices” in those markets. A similar but perhaps less directly relevant comment could be made for creating a summary of “best practices” in countries

¹ <http://www.seia.org/research-resources/solar-industry-data>



like Germany, Spain and France, where feed-in tariffs and incentives for the connection of micro-scale generation have been in place for many years. Board staff should undertake such background research in advance of recommending any changes to the Board.

The trend in the decline in costs for solar PV installations is going to continue. With or without a microFIT program, the province needs to be prepared for large scale deployment of solar PV at customer's premises. The OEB should host or facilitate a broader consultation on developing a distributor "**Micro-generator Connection Best Practices Guideline**". This would prove a valuable resource for LDCs and generators in further developing standard practices across the 77 LDCs in Ontario, and result in reduced time and costs to both LDCs and generators. This will allow better management of the continuing trend of small-scale, customer-based generation that will proliferate in the Province over the next decade. Continued standardization also enables quicker reduction in the microFIT rates that reflect the costs of system installation and operation.



Specific Issues Raised in the Discussion Paper

1. Offer to Connect

The OPA has amended the microFIT 2.0 process to require that an applicant submit a copy of the Parcel Register along with the application to verify property ownership. There is a cost of approximately \$30 with obtaining a Parcel Register, and the result of this change by the OPA has been to reduce the number of frivolous applications by creating a minimal “barrier to entry”. As a result of this change by the OPA, I am confident that the data would show that the percentage of Offers to Connect that result in actual project connections will have increased, relative to before this change was implemented.

That said, the OPA could change the microFIT rules again and the current “barrier to entry” could be removed, and there would be no threshold test to determine the seriousness of a customer making a connection request. Thus, it would be prudent to ensure that LDCs only have to service those applicants for connection that are reasonably serious, and this is best accomplished by introducing a reasonable charge for the preparation of an Offer to Connect to allow the LDC recover the LDCs time and materials costs that go into this process. Further, discouraging speculative requests will preserve the limited connection capacity to those applicants that are serious about their projects.

Of the 3 options proposed by Board Staff, option c) is reasonable with one qualifier. In some cases, the response to a connection request will be denial, as a result of technical limitations on the distribution network. In such cases, the LDC network may have reached its thermal limit on a feeder, reached its short-circuit limit on a station or may have some other technical limitation that prevents the LDC from providing the offer to connect.

In many cases, it will be impossible for a customer to anticipate such a denial. In any event, the level of effort in time and materials for an LDC to provide such denial (likely by email) will be negligible, and thus any fee that was charged in making the connection request should be fully refundable to the unsuccessful applicant.

If an applicant should receive its offer to connect and then choose not to proceed with connection, then it is perfectly reasonable for the applicant to forfeit its fee.

This detailed approach accomplishes all of the Board Staff’s desired outcomes.



2. Appropriate Timelines

In most circumstances, it is my understanding that LDCs are generally able to meet the DSC prescribed timelines. Hydro One was an exception as a result of poorly designed pricing as between the microFIT rooftop category and the microFIT ground mounted category which has since been rectified.

It would seem a reasonable outcome to establish a compliance target for the DSC timelines and a 90 or 95% level seems appropriate. That said, if the procurement design in future creates a rush on project applications of a certain category in a certain LDC service territory, then even a 90% compliance target will be impossible for an LDC to plan for and meet.

An outright extension of the timelines does not seem necessary, however if the number of requests exceeds a prior level of requests, then under such circumstances, the timelines should be relaxed. Perhaps if the number of requests exceeds historic levels (previous RRR reporting period?) by more than 2 or 3 times, then the timelines are extended by the same ratio, up to a maximum, of say 4 times.

3. Connection Agreement

The standard form of Connection Agreement is critical to the industry given the number of LDCs currently in Ontario. There are few provisions that are not covered by the current form of agreement including liability.

The current form of Agreement states:

3.0 Liabilities

3.1 You and the LDC will indemnify and save each other harmless for all damages and/or adverse effects resulting from either party's negligence or willful misconduct in the connection and operation of your generation facility or the LDCs distribution system.

3.2 The LDC and you shall not be liable to each other under any circumstances whatsoever for any loss of profits or revenues, business interruptions losses, loss of contract or loss of goodwill, or for any indirect, consequential, incidental or special damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise.

One of the goals of encouraging small scale generation is to empower homeowners to participate in the electricity supply system which has the effect of increasing awareness of the impact of energy consumption. The process for the homeowner or farmer must be simple, clear and eliminate barriers to participation.



It may be appropriate that a micro-generator's project be covered by an insurance policy, either the project owner or the installer, but the process for incorporating such a requirement must be seamless and must not add additional process steps to the already complex administrative contracting and connection procedure. Any requirement for insurance must be simply a statement in the connection agreement such as:

You agree to maintain insurance for your generation facility for the entire time that it is connected to the LDCs distribution system.

As an example, the complex and confusing process that was in place in Enwin's service territory until very recently was an example of unnecessary administration with the effect of discouraging participation in the microFIT program. Direct involvement by the insurance company in a microFIT connection is completely unnecessary and inappropriate.

Finally, if we want to get extremely creative, the OPA and the OEB should work together to combine the microFIT contract into the Connection Agreement (perhaps as an Appendix) so as to eliminate the OPA's requirement for ongoing administration of its obligations, and work with the LDCs to take on that function on the OPA's behalf, similar how the LDCs perform the settlement function on the OPA's behalf.

4. Monthly Service Charges

The level of the monthly service charges to the micro-generation customer seems reasonable and appears to reasonably reflect the costs of administration of the customer by the LDC. It is typically only when prescribed processes are not followed that an increase in administration is required.

Delays in providing Offers to Connect, delays in scheduling disconnections and reconnection to the existing electricity service, delays in installing generation meters and delays in administration of microFIT contract payments to customers all create the need for intervention by both installers, as well as the end customers with their LDCs. These interventions of course increase the costs to all parties, unnecessarily, and create negative customer experiences.

At this time, with only limited experience in some LDC service territories in connecting micro-generation facilities, it would be premature to consider any additional customer service support costs in the standardized Monthly Service Charges that have been established by the Board.

Further, material changes to the current monthly service charges could adversely impact customers that have budgeted for the current level of charge to justify their generation investment.



5. Connection Charges

The impact of the connection cost for a micro-generation project is material. At present, a 3 kW project could cost approximately \$15,000 installed. A connection cost of \$1800 represents well over 10% of the project cost. As installed costs fall to \$4/Watt, the percentage of the total project cost for connection increases to 15%. The declining costs of metering should be reflected in a more reasonable connection cost.

In order for a company to operate in Ontario's fragmented electricity sector, it is critical that the OEB maintain standardization in the connection process of micro-generation facilities. This is particularly true for monthly services charges and connection charges, as the latter can represent a material percentage of the overall project cost for a small rooftop PV project. Of course the standardization in charges should apply in the case of a basic generator connection, parallel to that of the treatment of a load customer.

The OEB should develop a standardized connection charge for all LDCs across Ontario to the benefit of the end use generation customer and to further reduce the costs of program administration for installers and customers. Streamlining and standardization will result in lower costs of installation and thus allow for lower microFIT contract rates to the benefit of all consumers in Ontario.

Cost Recovery

In the development of a standardized connection charge that reflects a reasonable average of costs incurred by LDCs in making micro-generator connections, the Board should also consider the cost recovery mechanism for such charges. For example, if a standard connection charge of \$350 were determined, then LDCs could recover such costs through an increase to the standard Monthly Service Charge (item 4. in this consultation). An increase to the monthly service charge of \$2 per month, for example would represent \$24 per year or \$480 over the 20 year term of the microFIT contract. Implementation of this change would require thoughtful planning and fair treatment of customers that have already paid for their connections.

This approach would create a financial incentive and reward for LDCs by making some of the costs of micro-generator connection recoverable over time, and thus form part of the LDC's rate base, on which it is entitled to earn a return.

The Board should set a standard amount for a basic connection.

The Board should allow LDCs to recover such standard costs through the monthly fixed charge.



6. Upstream Infrastructure Upgrades

There are logistical challenges that are posed by the application of the current language in the TSC and the DSC, and the difficulty that this creates in developing a methodology for reasonable cost allocation to micro-generation customers. That said, there is little rationale for exempting future micro-generation customers from cost responsibility. The development of infrastructure plans by LDCs should be the avenue for capacity upgrades for all customers benefit. These investments would then be recovered through rates paid to the LDC, and shared among all customers.

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