

White Paper

Procurement of Large Renewable Energy Projects

Presented to the Honorable Bob Chiarelli, Minister of Energy

By

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EXECUTIVE SUMMARY

The chasm between MicroFIT/Small Fit and Large FIT is very wide. This White Paper addresses the need for a Mid FIT stream of projects to help fulfill the renewable generation targets of rural municipalities and communities. For smaller rural communities, the Long Term Energy Plan and Regional Energy Plans should identify tranches of MicroFIT/Small Fit and Mid FIT renewable energy capacity aimed at helping to meet local energy needs that should be targeted at their annual power consumption, thus reducing the dependency on transmission provided energy, which carries with it line losses and increased costs. Mid FIT projects would be in the range from 500kW to 10MW. These projects can be connected directly to local distribution lines of the LDCs with lower costs and complexities than would be required with the transmission system connection.

The Regional Energy Plan should require municipalities to provide well planned designated areas for energy projects of all types, including renewable energy, to meet their local requirements. These municipalities should also be given incentives to provide areas for larger energy projects than microFIT and Small FIT, where practical, so that those projects can be placed in proximity to load and where they are supported by the host community.

With the advent of new technology and economies of scale, the Mid FIT projects can also result in significantly reduced cost per kWh to the consumer. In the case of wind projects in particular, the result of such implementation of new technology and scale, can result in single digit per kWh costs which achieves the downward bending of the cost curve desired by the Minister of Energy.

The Mid FIT projects discussed in this white paper would also allow municipalities, local communities, co-operatives, private corporations and aboriginal communities to all work as standalone proponents or in collaboration, in order to involve the host community both financially and socially in these projects to the benefit of all parties thus reducing the social stigma that has been associated with such projects.

BACKGROUND

On June 12, 2013 the Minister of Energy issued a directive to the Ontario Power Authority to continue with the FIT program subject to further amendments in line with certain policy objectives as detailed within the directive. The scope of this white paper does not focus on policy changes to the existing microFIT and Small FIT. Its emphasis will address the replacement of the former Large FIT program with a modified procurement process that will meet the delicate balance of cost to rate payers, municipal, community and aboriginal engagement and fairness to stakeholders.

The following are several policy objectives listed within the directive that are salient to this paper and summarized below.

"It's also clear that we need to make changes to increase local control over the siting of renewable energy projects. These changes will give communities and municipalities a stronger voice, more options and new tools when it comes to renewable energy." Bob Chiarelli, Minister of Energy

- Review of LTEP by Aug 1st from IESO & OPA
- Develop a competitive procurement process for renewable projects over 500 kilowatts (kW).
- The new process will replace the existing large project stream of the Feed-In Tariff (FIT) program and better meet the needs of communities.
- Require energy planners and developers to work directly with municipalities to identify appropriate locations and site requirements for any future large renewable energy project
- Work with municipalities to determine a property tax rate increase for wind turbine towers
- Provide funding to help small and medium-sized municipalities develop Municipal Energy Plans which will focus on increasing conservation and helping to identify the best energy infrastructure options for a community
- Work with municipalities and aboriginal communities to help identify locations and siting requirements
- Revise the Small FIT program rules for projects between 10 and 500 kW to give priority to projects partnered or led by municipalities

THE PUBLIC INTEREST

The Ministry of Energy as acting in a proactive and accountable manner, has taken on the challenge of modifying the FIT 2.0 renewable energy program to meet the evolving needs of all stakeholders associated with renewable energy generation. The latest directive from the Minister's office addresses these challenges head on. The requisite characteristics that the microFIT, Small FIT and Large FIT procurement replacement must achieve is to give municipalities more control over the siting of projects while ensuring the interest of the communities and local individuals of all stripes are satisfied as well. Notwithstanding, as renewable generation programs have now been in place in Ontario for a number of years, a level of program maturity has been achieved and should enable rate payers to reap a cost benefit. This white paper focusses primarily on providing recommendations on the development of a

“Large FIT” replacement procurement strategy that in the opinion of this paper must be able to provide an equitable balance between the planning, economic and social drivers that challenge policy makers.

A key element of the Minister’s Directive is to engage Municipalities and their constituent parties in a dialogue regarding the siting of future “Large FIT” projects within their boundaries. It is here that the Ministry should ensure that the Municipality has an understanding of the size and location of potential MW’s of generation development that has been pre-determined by the Regional Energy Plan for their area. The municipality should then solicit input from a wide spectrum of stakeholders including project proponents and use good planning principles to validate siting opportunities within their boundary that will support “Large FIT” projects

The participation of the Municipality, Public Sector and Aboriginals is clearly an important goal of the Directive. To a great extent the microFIT and Small FIT programs have been designed to encourage a variety of proponents to partner with these groups to gain priority points and improve the likelihood of a receiving a power generation contract. With greater than a 50% equity ownership of a renewable energy project these same groups may apply for generation contracts that have capacity set aside by the OPA for this use. The size of the generation projects which can utilize these rules is limited to 500 kW or less with FIT price schedules offering a confirmed price for generation. Project control and siting can be maintained through good municipal planning practices as applied to both rural and urban areas. These two programs lend themselves well to individual residential use, small projects and community, municipal involvement and are typically found within a rural and urban environment.

REGIONAL PLANNING

The Ministry of Energy and the OPA is encouraged to develop and communicate high level Ontario based targets, for the “Large FIT” replacement as early as possible. The importance of the Ministry in communicating this is vital to supporting a sustained confidence across all provincial, regional and local government authorities. The Regional Energy Planning initiative should also demonstrate and quantify the need for additional “Large FIT” tranches of renewable energy MW’s for each of the OPA’s designated planning regions. This should take into account key planning criteria such as local commercial, industrial and residential demand growth, available grid infrastructure and limits, conservation overlays, study periods, Small FIT and microFIT renewable energy generation contribution, etc. Many of these drivers are within the control of the resident municipalities and input received by the OPA can influence the Regional Energy Plan to better reflect the wants and needs of the local area.

The OPA should work with the MOE / MNR, IESO, LDC’s and municipal planners to identify geographic areas within the region that have potential to support Large FIT sized projects. The location of these areas should be derived based upon an agreed upon set of fatal flaw criteria and associated analysis. These “green energy zones” would provide a starting point for more in depth consultation with municipal, community, aboriginal parties and project proponents as to where projects may be potentially located.

It is suggested that during the Regional Energy Plan development process, developers and other proponents of renewable energy projects have an opportunity to meet with Municipality, Community and Aboriginal governance to validate their interest in placing projects within their “green energy zones”. It would also be an appropriate time for proponents to review and sell the many positive benefits associated with housing a green energy project and to also identify potential siting opportunities on a more granular basis. Proponents could include private developers, renewable energy co-ops, other community groups and individuals, aboriginal groups, public sector entities, etc. An outcome of this effort would result in a more clear and pre-determined path for the implementation of renewable energy generation projects by technology, size and location within communities.

After this engagement exercise has taken place, a more realistic breakdown of generation mix can be incorporated into each Regional Plan by the OPA. Renewable energy targets can then be better allocated and parsed by Tier II municipalities (Townships) within the planning region through this exercise. This output will provide a base plan with which renewable energy targets can be implemented on a more granular geographic basis.

ENGAGING THE MUNICIPALITY

A key element of the Minister’s Directive is to engage Municipalities and their constituent parties in a dialogue regarding the siting of future “Large FIT” projects within their boundaries. It is here that the Ministry and OPA should ensure that the Municipality has an understanding of the location of “green energy zones” and the amount of potential MW’s worth of generation development for their area. The municipality should then solicit input from a wide spectrum of stakeholders and use good planning principles to validate areas within their boundary that will support “Large FIT” projects. It is recommended that such areas should also be vetted and approved by the OPA to ensure proper municipal planning diligence has been followed and results have not been “gamed” by the self-interest of any individual or parties.

The participation of the Municipality, Public Sector and Aboriginals is clearly an important goal of the Directive. To a great extent the microFIT and Small FIT programs have been designed to encourage a variety of proponents to partner with these groups to gain priority points and improve the likelihood of a receiving a power generation contract. With greater than a 50% equity ownership of a renewable energy project, these same groups may apply for generation contracts that have capacity set aside by the OPA for this use. The size of the generation projects which can utilize these rules is limited to 500 kW or less however with FIT price schedules offering a confirmed price for generation, predictable rates of return can be determined. Project control and siting can be maintained through good municipal planning practices.

COMPETITIVE PROCUREMENT

The “Large FIT” replacement program creates an opportunity for the Ministry of Energy and the OPA to take advantage of large scale renewable energy projects to help reduce the cost of energy supply and delivery of power generation in Ontario. Depending on the degree of balance between proponents, technologies and degree of cost savings the Ministry wishes to achieve, a program can be developed to achieve a variety of goals or a perhaps the singular goal of purely reducing cost.

It is recommended that the “Large FIT” be split into two categories. The first being a large scale competitive RFP based exercise that is open to any proponent that is interested in submitting a bid proposal for lowest cost generation within Regional Areas. The second category is procured under rules that will fall between those of the Large FIT and Small FIT procurements.

First Category – Large FIT

The first category will enable the Ministry and the OPA to obtain the greatest number of renewable energy MWs associated with its annual goals by region. By encouraging large project sizes in this category, an economy of scale benefit is derived which will contribute to a significant aggregate cost reduction across each region. In order to obtain optimal pricing, all types of renewable generation technologies should compete for available MWs within the appropriate designated green energy zone. In some areas certain technologies may have an advantage over others due to resource availability and cost efficiency. Procurement within this category would tend to be connected to the grid infrastructure at the transmission level.

Many municipalities may have difficulty in accepting the placement of large projects within their boundary areas. For a host of reasons beyond the application of good planning principles, the implementation of regional planning targets may be impeded. It is here that the Ministry of Energy and the OPA should ensure that the consequence of non-compliance is counter-measured through a veto if necessary or through a burden imposed via increasing rates within the region. These rates would reflect the higher cost of importing power from additional regional areas and net of and microFIT, Small FIT, conservation, demand response, etc. program overlays. In addition the Ministry and OPA may reserve the right to impose a generation technology other than renewable generation which may be even less popular.

Across the majority of planning regions located within southern Ontario, many municipalities may also be met with practical challenges associated with the siting large transmission connected projects. In part this may be due to the lack of sufficient setback distance to occupied dwellings, setback distance to environmental constraints and the loss of high quality agricultural land. Within southern Ontario, a high percentage of prime rural area that would accommodate such projects has already been contracted by existing and future large projects derived from past RES and FIT procurement efforts. The siting of large projects to meet regional planning targets may be problematic for this very reason. Large ground mounted solar energy and large wind energy projects will have this challenge despite their many benefits.

Another valid challenge to the sustainability of any energy generation program is public acceptance. This has much to do with municipalities and their constituents feeling that control over placement of renewable and non-renewable energy generation projects has been taken away and left them with no influence. Unfortunately many proponents of existing projects have located and continue to locate their projects in areas unpopular to local residents. Generally speaking, such unpopular areas tend to be close to shorelines along the Great Lakes, centres of urban density and rural county areas owned by hobby farmers and retired individuals. The above comment is based upon many years of observation and the experience of developers in Ontario. Where less confrontation can be typically found is in rural agricultural areas of low population density. These areas are inhabited by active agricultural or livestock farmers whom have resided on these farms for generations. These individuals tend to value supplemental income opportunities by participating in renewable generation projects as a hedge to their farming business.

Second Category – Mid Sized FIT

The second category of projects that provides an excellent compromise between Large FIT projects, Small FIT and microFIT are midsized projects otherwise known as “Mid FIT”. These projects would enable a good balance between the needs of the Ministry of Energy and the OPA to meet regional renewable generation targets, competitive price and municipal acceptance. It is recommended that this suite of generation projects be sized to range between 500 kW and 10 MW in order to extend more enriched rural economic opportunities even further to municipal, community and aboriginal groups. Connection to the grid would be at the 3 phase distribution level which is less complex than transmission connected projects to commission and operate. Projects may also be sited closer to load centres thus minimizing their influence on the operation of transmission systems.

This category of projects would allow all the connection of all types of renewable energy technologies including solar, wind, biomass, biogas and landfill gas, however, a main objective of projects sized within this range is to reduce the cost of generation through a competitive procurement process despite their smaller project size. Due to the nature of improved economies of scale benefit relative to Small FIT and MicroFit, the price per kWh can be significantly reduced. In addition, more favourable efficiencies now exist through improved technology and higher output per footprint. It is recommended that price per kWh generated by projects in this category be adjusted downward from the current Small FIT rates to better represent cost reality. It is felt that pricing for each technology is adjusted downwards significantly. Based upon a financial analysis of several well sited 10 MW wind farms, a decrease of up to 15% would still render a reasonable rate of return to meet the expectations of proponents and municipalities. For wind projects, this would put the per kWh pricing in the sub 10¢ per kWh range, making it competitive to other traditional energy sources. Each renewable generation technology would require its own distinct analysis that may yield different cost reduction opportunities. Additionally, a point incentive system similar to Small FIT is recommended to incent community, aboriginal and municipal groups to participate in projects and increase their likelihood of securing a power generation contract. It also stimulates an element of competition between proponents resulting in optimal benefits returning to the community.

As with the Small FIT and microFIT programs, Mid FIT projects lend themselves favourably to a wide spectrum of ownership models including co-ops, municipalities, private partnerships, communities and aboriginal groups. This classification of projects would not be found in urban areas but typically in rural agricultural areas. Municipalities may indeed choose to partner and favour the planning and siting of such projects within their boundary as they are smaller than Large FIT projects and less invasive and easier to site. In addition, this project size makes it easier to meet regional MW targets as specified with the Regional Energy Plan than a much smaller number of MWs generated by the microFIT and Small FIT programs.

It has also been shown that there is significant, proven community and aboriginal interest in this size range within rural agricultural areas. Equity and financing of Mid FIT sized projects are well within the capability of such local groups. The benefits generated by these projects are significant and can have a positive impact on municipalities and communities where such benefits could be re-invested in a number of ways. The derived benefits should be agreed upon during the development stages of the Regional Energy Plan where proponents could negotiate such deals in exchange for siting rights and zoning support. Any projects that can find consensus during the Regional Energy Plan consultation period could be incorporated into the plan by the OPA to help fill renewable energy generation targets. Large FIT projects should not be allowed to participate in a similar points system that encourages benefits as there is a likelihood that proponents of large transmission connected RFP driven projects could “game the system” by buying community support thus marginalizing other proponents attempting to develop smaller projects under the proposed Mid Fit category. Such gaming would lead to the marginalization of proponents of smaller project thus reducing the fairness and balance a procurement program should strive for. Large FIT procurement should be based purely upon lowest price offered to avoid this conflict and enable the Ministry and OPA to receive aggressive pricing to contribute to an overall reduction in the cost of renewable generation within Ontario.

Across all categories of FIT procurement, the following useful incentives should also be considered as they would resonate in a positive manner with communities. A price incentive should be applied to projects that have a significant component of Ontario content. This includes the contribution derived from manufacturing of components and implementation activities associated with a renewable generation contract. Such an incentive would help to maintain and grow the number clean technology jobs in Ontario and should remain a government priority. This non-mandatory incentive would avoid the recent issues with the WTO ruling since it would be an optional choice and not a mandatory rule. Such an incentive should vary by generation technology and be capped at an upper limit which reflects the percentage difference between domestic and foreign sourced costs primarily related to manufacturing of components.

Another incentive that should be directed towards Mid FIT and Large FIT procurements is to significantly improve upon the minimum setback distances between the location of human receptors and the renewable energy generation units within the project area. This has been a “hot button” issue with many communities and rural residents and is a significant root cause of dissent. Mid FIT projects should be compensated in terms of bonus points while Large FIT projects could be compensated through a marginal price adder.

It should be pointed out that, although outside of the procurement process and post contract award, major improvements must be made to the permitting process. Currently, proponents that are awarded contracts are subjected to an excessive period of time to obtain a Renewable Energy Approval from the Ministry of Environment. Outside of water power projects, a significant number of projects are currently experiencing a cycle time of 3-4 years between the time studies and analysis is initiated by the Ministry of Natural Resources to the time a final permit is received from the Ministry of Environment. A reasonable process target for approvals should be not more than 18 months for most Mid FIT and Large FIT projects. It is also suggested that during the development of the Regional Energy Plans, the OPA, IESO, LDCs, MOE /MNR and municipal planners carry out a high level fatal flaw analysis to determine the location of green energy zones within the region where renewable energy generation for Mid FIT and Large FIT procurements would be supported. This exercise would also help rationalise the tranche sizing of renewable generation targets within a specific region. In addition, the municipality would also be able to input or validate these recommendations as part of the engagement process as part of the Regional Energy Planning process. Once these areas are determined, less confrontation between developers and municipalities would result and make for a quicker and more effective project approval cycle.

THE SITING OPPORTUNITY

In order to increase the possibility of successful siting and acceptance of the Mid FIT generation category within municipalities and communities, proper project siting of Mid FIT sized projects must be encouraged to minimize “hot button issues” that arise between residents and proponents. To site these projects properly, collective planning by key stakeholders should be encouraged to target true rural farming regions within pre-determined green energy zones. A significant advantage that this category of projects has over Large FIT is that smaller project sizes are less invasive and less conflicting with a wide range of controversial and sensitive constraints that can be found in rural farming areas.

As a general rule, stakeholders should tend to avoid siting projects in proximity to popular lakefront areas inhabited by a high concentration of seasonal dwellings, permanent residences and recreational properties. Placing projects within close proximity to villages, hamlets and small concentrations of dwellings and rural areas sensitive to aboriginal groups should be avoided as well. The experience of developing Large FIT projects from past procurement programs has created much negativity towards Green Energy generation for this reason. In addition, by not incenting early consultation and acceptance with the communities, public opinion related to renewable energy development has become increasingly negative.

Other advantages offered by Medium FIT sized projects are that their placement is suited to a variety of renewable generation technologies. Most technology does not require a significant footprint on farm property and mixes well with livestock & agriculture. The cost / MW to install and maintain is very competitive and improving with new generation technology becoming more efficient and reliable to operate with greater capacity factors as result. Grid connection to distribution lines is also becoming less problematic with newer technology being able to interact in a more reliable manner. Mid FIT projects

can be sited within reasonable proximity of load, inside municipal boundaries and reduce the utilization of transmission systems, line losses and associated thermal restrictions. In addition, distribution connected projects are easier to pre-screen by the OPA and LDC's well in advance of the awarding of a power generation contract. With the simplicity of this category of projects to site, construct and operate and with good benefits being returned to the community and municipality, Ontario can more quickly meet its renewable generation targets

The MicroFIT and Small FIT categories offer a good opportunity to deploy solar, biomass, small hydro small wind and farm biogas within both urban and rural areas. For Mid FIT, the government should encourage the participation of all renewable technology to be part of the Ontario generation matrix, however, it can be argued that wind generation has many superior attributes in this project size range that others do not have. New Class 3 wind generation technology can harness lower wind speeds and have greater flexibility to be placed in less invasive rural locations. Costs associated with this technology are very competitive to other forms of renewable generation technology and are quick to deploy and simple to operate in a grid friendly manner. The IESO is also now better equipped to balance wind with other forms of generation within the Ontario generation mix via better wind forecast models and the future dispatch of larger projects will also avoid surplus generation events. The Class 3 wind locations, which are typically inland, with lower population densities and not in close proximity to lakefronts, offer good potential. An educational dimension to communication with constituents concerning wind energy should be given by project proponents during the earliest stages of public consultation. Many anti-wind concerns have been refuted at Environmental Review Tribunal and provide good precedent going forward.

RENEWABLE ENERGY CO-OP MODEL

The co-operative model is an ideal development tool as they are typically guided by self-regulated and democratic principles which allow for an optimal delivery of services in a local economy. They work well for the development of renewable energy projects and are typically guided by seven internationally recognized principles which enable strong communities:

- Voluntary and open membership
- They are exclusively controlled by members in a democratic fashion
- Member economic participation
- Autonomy and independence
- Education, training and information
- Co-operation among co-operatives
- Concern for community

The success of renewable energy co-ops is not only defined by their profitability but the positive impact on the improved well-being of its members and the communities where they live through the local return of benefits while participating in healthy, clean energy generation. Each member is entitled to

democratic participation through a one member – one vote process regardless to the individual level of investment. No single member can therefore take control. Decisions concerning all manner of issues are made by majority consensus on the theory that communities and memberships ultimately know what's best for them. Seeking municipal council support and participation in the renewable energy co-op would therefore enable a sustainable vehicle to return benefits to the municipality and all its members. The Ontario co-op community is large and holds significant clout as a lobby group. The Ontario Co-operative Association has assembled the following statistics to support this:

- Ontario co-operatives are owned by more than 1.4 million members and utilize about 49,000 volunteers including 10,000 board members
- Ontario co-operatives provide more than 15,000 jobs, have \$3 billion in assets and produce \$2.1 billion in revenue
- There are more than 9,000 co-operatives in Canada with more than 18million members with more than \$275 billion in assets

In May, 2012 the Canadian Co-operative Association commissioned Abacus Data to conduct a national survey measuring the perceptions and awareness of co-operatives by Canadians. The following results were obtained:

- 84% recognized that co-ops are more likely to support the community's values
- 82% recognized that co-ops are more likely to support the local economy
- 72% recognized that co-ops more likely to have environmentally sustainable practices

Renewable energy co-op opportunities exist for municipalities, communities, individuals and aboriginals groups in the Mid FIT project size range. Rural land owners may wish to pool resources with others in their community to enable and manage such projects via renewable energy cooperatives. Land owners may include all the above mentioned parties in their co-op and they may wish to take advantage of a larger sized generation project in this category and have the flexibility of utilizing a number of technology types. Mid FIT projects, although complex in their development, are well within the capabilities of the co-op to execute their development and operation. Equity contribution and the ability to raise financing by co-ops also are generally achievable within the requirements imposed by FSCO. The managing of co-ops of this size range has been successful in Ontario and other countries.

If a local co-operative is unable to raise all of the required equity for a particular project, then it can easily partner with a private company, municipality or aboriginal group in order to ensure that the project will get completed. This private/co-op model has been successfully used in the past on other projects through Limited Partnerships or Joint Ventures.

Projects of this category are an optimal size for the engagement of community co-ops. The Co-op Board of Directors is elected by the co-op members and is composed of local community individuals and other individuals within municipality including aboriginal groups. Once a contract is obtained, members provide investment equity via a share schedule and own a piece of the project. Annual community funds can then be identified and re-invested into community as per board resolutions. In order to negate

potential acceptance challenges from neighbours living close the project, an annual “Viewshed” fund will be created and to be distributed to all residents within a 1 km radius of the turbines to help enable project acceptance. Seeking municipal support resolutions for each co-op is paramount through early and timely engagement. Gauging aboriginal interest and seeking partnerships should also be part of the early engagement process. Community participation in such co-operatives has the effect of dampening local anti-renewable politics.

SUMMARY OF A BETTER PROCUREMENT MODEL

A bullet point summary of a proposed procurement model that could be incorporated is as follows.

- Maintain the MicroFIT and Small FIT programs as described in the latest Ministry of Energy directive dated June 12, 2013.
- The Large FIT procurement program should be divided into two parts: A Mid-Sized FIT procurement and a Large Sized FIT procurement.
- The Large FIT procurement should be aimed at projects > 10 MW and connected at the transmission level.
- The Mid FIT procurement should be aimed at projects between 500 kW and 10 MW and connect at the distribution level.
- The Large FIT procurement is open to any technology and is RFP based with the winning bids based purely on lowest cost.
- The Mid FIT procurement is open to any technology and based upon a point system similar to Small FIT and with Small FIT tariff prices reduced by 15% to reflect economies of scale.
- The OPA will have annual Large FIT targets that are identified by planning region through its Regional Energy Plan.
- The OPA will have annual Mid FIT targets that are identified by planning region through its Regional Energy Plan.
- The OPA will establish green energy zones within each Regional Planning Area based upon a high level fatal flaw analysis via input from the IESO, MOE / MNR, LDCs and municipal planners and identify them within the Regional Energy Plan
- Within the green energy zones, site locations for potential Large FIT projects are validated by the OPA through municipal, community and aboriginal consultation and are built into the Regional Energy Plan.
- Within the green energy zones, site locations for potential Mid FIT projects are based upon municipal, community and aboriginal consultation and largely fronted by proponents and ideally built into the Regional Energy Plan.
- Proponents of Mid FIT projects will strive to maximize “points” based upon municipality approval of technology, siting and benefits derived from the proposed project
- Municipal and community elected representatives must ensure good planning and governance practices are employed when determining the siting of Large FIT projects.

- Municipal and community elected representatives must ensure good planning and governance practices are employed when determining the siting locations of Mid FIT.
- The Ministry may direct the OPA to veto unwarranted resistance to Large FIT projects and/or attempt to compensate for this avoidance by imposing higher rate structures, more aggressive conservation targets, demand response plans, etc. within the region.
- The Ministry may direct the OPA to veto unwarranted resistance to Mid FIT projects and/or attempt to compensate for this avoidance by imposing higher rate structures, more aggressive conservation targets, demand response plans, etc. within the region
- Mid FIT project size range good for the engagement of community renewable energy co-ops
- Wind energy has many positive attributes and should still be considered as a key generation technology for Mid FIT procurement.
- The Renewable Energy Approval process must be streamlined and is far too lengthy and cumbersome for project proponents.
- Introduce price adder incentives for the inclusion of Ontario content for Mid FIT and Large FIT projects.
- Introduce priority point incentive for Mid FIT and Large FIT projects that guarantee to exceed and improve upon established setback limits to dwellings and sensitive features.

CONCLUSION

The goals of the Minister of Energy are clear regarding the future of renewable energy generation. The target of developing a sustainable program which engages those interested in building a stronger community through participation in clean, reliable energy is achievable. In addition, a tangible reduction of the cost of the program must also be an outcome of any procurement strategy associated with it. The procurement process outlined in this White Paper clearly meets these challenges and all have a role to play in making this successful. The introduction of a Mid FIT range of project sizes helps to facilitate this objective although requiring more savvy on behalf of the project proponents to execute their development within the municipality.

APPENDIX – STANDARD DEFINITIONS

The following abbreviations have the meaning stated below:

- 1) **Class 3 Wind** - is a low speed wind regime based on the IEC 61400-1 definition
- 2) **FIT** - means a Feed-in Tariff program offering a guaranteed pricing structure for renewable electricity production enabled by the Green Energy and Green Economy Act, 2009
- 3) **IESO** - means the Independent Electricity System Operator of Ontario
- 4) **Large FIT** - means a FIT procurement program managed by the OPA for greater than 500 kW per contract
- 5) **LDC** - means the owner or operator of a Distribution System and licensed as an “electricity distributor”
- 6) **kW** - means Kilowatt, **kWh** means Kilowatt hour
- 7) **LTEP** - means the Long-Term Energy Plan
- 8) **microFIT** - means a FIT procurement program managed by the OPA for a generation < 10kW per contract
- 9) **Mid FIT** - means a proposed sub-category of Large FIT for between 500 kW and 10 MW of generation per contract
- 10) **Ministry** - means Ministry of Energy, Ontario
- 11) **MNR** - means Ministry of Natural Resources, Ontario
- 12) **MOE** - means Ministry of Environment, Ontario
- 13) **MW** - means Megawatt
- 14) **OPA** - means the Ontario Power Authority
- 15) **RES** - means the Renewable Energy Supply procurement program operated by the OPA
- 16) **RFP** - means a Request for Proposal methodology for procurement of generation
- 17) **Small FIT** - means a FIT procurement program managed by the OPA for generation range of between 10 kW and 500 kW per contract