Corporate
Report

Originator's Files

DATE:

August 29, 2012

TO:

Chair and Members of General Committee

Meeting Date: September 19, 2012

General Committee

SEP 19 2012

FROM:

Paul A. Mitcham, P.Eng., MBA

Commissioner of Community Services

SUBJECT:

Revised Council Resolution in Support of Rooftop Solar

Applications Under the Provincial Feed-in Tariff (FIT) Program

RECOMMENDATION:

That Council pass a resolution supporting, without reservation, rooftop solar projects in Mississauga as outlined in the Corporate Report titled

"Revised Council Resolution in Support of Rooftop Solar

Applications Under the Provincial Feed-in Tariff (FIT) Program" dated August 29, 2012 from the Commissioner of Community Services and that a resolution repealing Resolution 0170-2012 be

passed by Council.

REPORT HIGHLIGHTS:

- Based on the requirements of the draft Feed-in Tariff (FIT) 2.0
 Program, on July 4, 2012 Council passed Resolution 0170-2012
 supporting, in principle, rooftop solar applications under the FIT
 Program subject to certain conditions.
- On August 10, 2012, the Province of Ontario released the new Feed-in Tariff (FIT) 2.0 Program, which clarified the requirements for municipal council support resolutions to qualify applicants of the FIT 2.0 Program for priority points.
- The wording in the July 4, 2012 Council resolution does not meet the new FIT 2.0 Program requirements to enable applicants to qualify for priority points.





- A revised blanket Council resolution, which excludes the conditions listed in the July 4, 2012 Council resolution, is proposed for the purpose of enabling applicants to qualify for priority points.
- In order for applicants to the FIT 2.0 Program to qualify for priority points based on municipal council support, Council must pass the revised resolution in its prescribed form.
- The application window for small FIT projects (>10 kilowatt (kW)
 ≤ 500 kW) is anticipated to open October 1, 2012 and remain open
 until November 30, 2012.

BACKGROUND:

On July 4, 2012, Mississauga Council passed Resolution 0170-2012 to support, in principle, solar rooftop projects in Mississauga. The resolution was based on the requirements of the draft Feed-in Tariff (FIT) 2.0 Program and passed in anticipation of the new Feed-in Tariff (FIT) Program being released. The June 14, 2012 Corporate Report to General Committee is contained in Appendix 1.

On August 10, 2012, the Ontario Power Authority (OPA) released the new FIT 2.0 Program which clarified the requirements for municipal council support resolutions to qualify applicants of the FIT 2.0 Program for priority points. The application window for small FIT projects (>10 kW \leq 500 kW) is anticipated to extend from October 1, 2012 to November 30, 2012. All applications received during the application window will be reviewed according to the new FIT 2.0 Program Rules for compliance and for the prioritization of applications. Where projects have the same number of priority points, the time stamp will be used to determine the order in which projects will be tested for available transmission and distribution capacity. The OPA anticipates awarding 200 megawatts of small FIT contracts.

The new FIT 2.0 rules stipulate that, in the application for the FIT Program, priority points will be awarded for certain factors. Two of the priority points will be given for a municipal council support resolution. A prescribed form/template for a municipal council blanket support resolution is provided under the FIT 2.0 Program. The wording in the template stipulates that a council support, without reservation, renewable energy projects. In addition, a confirming bylaw demonstrating the support of the local municipality is required.



PRESENT STATUS:

There are two aspects of the July 4, 2012 Council resolution that do not comply with the new FIT 2.0 Program:

- 1. The words support "in principle" do not meet the intent of the OPA's prescribed forms which state support "without reservation"; and
- 2. The three conditions do not meet the intent of supporting "without reservation".

COMMENTS:

City staff has consulted with the OPA to ensure that the revised resolution (Appendix 2) will be acceptable for the priority points.

In order to enable applicants to the FIT 2.0 Program to qualify for the priority points tied to municipal council support, Council must pass a resolution in the form prescribed by the OPA. The following outlines the differences between the July 4, 2012 resolution and the proposed resolution:

- Change the wording to: "The Council of the City of Mississauga supports without reservation the construction and operation of Rooftop Solar Projects", thereby removing the words "in principle" and adding the words "without reservation".
- Remove the three conditions relating to anti-reflective surfaces, fire safety and all applicable laws and regulations. Although the conditions would be removed, staff would ensure that, when providing copies of the Council resolution to applicants, information would be provided notifying applicants of these issues.

The requirement for a confirming by-law can be met with the confirmatory by-law which is passed after each Council meeting.

Passing the new resolution in its prescribed form shows Council's support of rooftop solar projects in Mississauga without reservations or conditions. It is unlikely that this new resolution will undermine any of the consents or permits that are required by the City or any other authority as the wording of the prescribed resolution provides

that the sole purpose of the resolution is to enable FIT applicants to gain priority points and that the resolution is not to be used for any other purpose.

FINANCIAL IMPACT:

There are no financial impacts of the revised blanket Council resolution in support of rooftop solar installations.

Where the rooftop solar installation is on a City-owned building, there will be revenue generated from the lease. The amount generated for each building will vary depending on the type and size of the installation.

CONCLUSION:

The revised Council support resolution will increase FIT 2.0 Program applicants' chances of being awarded the opportunity to build rooftop solar projects in Mississauga by enabling such applicants to qualify for priority points.

ATTACHMENTS:

Appendix 1: June 14, 2012 General Committee Corporate Report titled "Council Resolution in Support of Rooftop

Solar Applications Under the Provincial Feed-in

Tariff (FIT) Program".

Appendix 2: Revised Council Support Resolution for Rooftop

Solar Applications Under the Provincial Feed-in

Tariff (FIT) 2.0 Program.

aul A. Mitcham, P.Eng., MBA

Commissioner of Community Services

Prepared By: Mary Bracken, Environmental Specialist



Clerk's Files

Originator's Files

DATE:

June 14, 2012

TO:

Chair and Members of General Committee

Meeting Date: June 27, 2012

General Committee

JUN 27 2012

FROM:

Paul A. Mitcham, P.Eng., MBA

Commissioner of Community Services

SUBJECT:

Council Resolution in Support of Rooftop Solar Applications

Under the Provincial Feed-in Tariff (FIT) Program

RECOMMENDATION: That Council pass a motion which supports, in principle, rooftop solar projects in Mississauga as outlined in the Corporate Report titled "Council Resolution in Support of Rooftop Solar Applications Under the Provincial Feed-in Tariff (FIT) Program" dated June 14, 2012

from the Commissioner of Community Services.

REPORT HIGHLIGHTS:

- The Province of Ontario will be releasing a new Feed-in Tariff (FIT) program.
- The draft FIT 2.0 program provides municipalities the opportunity to show their support for renewable energy projects by issuing a council support resolution.
- Mississauga has received numerous requests for Council resolutions supporting rooftop solar projects.
- The City has entered into an agreement with a solar photovoltaic company where the City will lease the roof space at selected City facilities and the company installs, owns, and operates the rooftop solar systems. Applications will be submitted to the FIT program for installation of solar photovoltaic systems on selected City

- buildings. A Council resolution will be required to qualify for two priority points under the FIT application process.
- Planning Act approvals do not apply to renewable energy projects.
- The Building Code Act applies to renewable energy projects.
- A blanket Council resolution is proposed that supports rooftop solar projects, in principle, subject to a number of issues being addressed, such as those relating to: glare, safe access during emergencies, and heritage buildings.
- Supporting renewable energy projects is consistent with goals in the Strategic Plan, Living Green Master Plan, Official Plan, Economic Development Strategy and the City's Corporate Energy Management Plan.

BACKGROUND:

Province of Ontario Renewable Energy Initiatives

The Green Energy Act (the "Act") came into effect in 2009. The Act addresses energy efficiency, energy conservation and demand management, and the promotion of renewable energy technologies. Renewable energy sources include: wind, waterpower, biomass, biogas, landfill gas, solar photovoltaic, and geothermal. The Act removes Planning Act authority over renewable energy projects. The Building Code Act remains applicable law and, as such, building permits are required depending on the size of the project.

In 2009, the Ontario Power Authority (OPA) released a Feed-in Tariff (FIT) program which included two purchase agreement programs for renewable energy projects:

- FIT program Applies to renewable energy projects over 10 kilowatts (kW);
- microFTT program Projects 10 kW or less, focussed on homeowners and small businesses.

The purpose of the FTT program was to encourage renewable power generation through a guaranteed pricing structure for renewable electricity production. It included standardized program rules, prices

and contracts for those interested in developing a qualifying renewable energy project.

This report focuses on the FIT program and does not discuss the details of the microFTT program.

In 2011, the Ontario Ministry of Energy undertook a review of the FIT program. The feedback received from municipalities included concern relating to the lack of municipal authority over renewable energy projects. In April 2012, a draft of the revised FIF program (FIT 2.0) was released for comment. At the time of writing this report, the final FIT 2.0 program had not been released, but is anticipated any time.

The draft FIT 2.0 program includes revised rules for applications and a revised FIT price schedule.

The 2009 FIT program pricing was designed to kick-start the development of a domestic renewable energy industry. Prices for solar rooftop projects ranged from 53.9 cents per kilowatt hour (\$\psi/kWh\$) to 71.3 \$\psi/kWh\$, depending on the size of the project (higher prices for smaller projects). The present domestic renewable energy sector is now of sufficient size to drive economies of scale and lower prices. The draft FIT 2.0 price schedule proposes a 10% to 25% reduction for rooftop solar installations. Prices in the draft FIT 2.0 program price schedule range from 48.7 \$\psi/kWh\$ to 54.9 \$\psi/kWh\$, depending on the size of the project. A 15% price reduction for wind generation is proposed and no price changes are proposed for biomass, biogas and landfill gas projects. The OPA intends to review the FIT price schedule annually or as necessary based on changes in market conditions.

The draft FIT 2.0 program also introduces a point system for evaluating renewable energy projects. Of these priority points, there is the opportunity to submit support from the municipality in the form of a council support resolution. In the context of Mississauga, for rooftop solar projects, there would be a total of seven priority points available, two of which are attributed to an applicant having a supporting municipal council resolution.

The draft FIT 2.0 process has a number of stages. Initially, when an applicant submits a FIT application to the OPA for a renewable energy project they need to provide information such as proof of leasing or ownership of the building rooftop and general details of the project. It is at this stage that the council support resolution is requested for submission as part of the FIT application. The application is then reviewed by the OPA and successful applicants are selected and contracts awarded. This allows the applicant to pursue financing and further details of the project. The applicant has 18 months to install the project. During this time, the applicant must submit a notice to proceed, which includes a financing plan, impact assessment, domestic content, etc. The applicant must apply to the municipality for a building permit and the building permit must be issued prior to installation of the project. During the review of the building permit application, the municipality ensures that the solar installation is safe and abides by the Building Code. Structural implications such as the roof's structural integrity, the additional loading from the solar panels and how they are fastened are some of the factors that are examined.

City of Mississauga Renewable Energy Projects

In 2007, the City installed a 25 kW solar photovoltaic generation plant on the roof of the Hershey Centre as a pilot program. Originally, the City entered into an agreement under the Renewable Energy Standard Offer Program, which was upgraded to a FIT agreement in 2010. The pilot installation has been successful and has generated revenue for the City.

In 2011, the City issued a Request for Proposal to qualified photovoltaic power generation developers for leasing rooftop space at selected City facilities. The City completed a procurement process and has entered into an agreement with a solar photovoltaic company where the City will lease the roof space and the company installs, owns, and operates the rooftop solar systems. Once the FIT 2.0 program is released and the window for applications is open for rooftop solar projects, the company will submit applications to the OPA. Although the installations will be on City-owned buildings, the solar photovoltaic company will still require a Council resolution to qualify for the two priority points under the FIT application process.

Rooftop Solar Installations in Mississauga

There are many rooftop solar installations in the City of Mississauga. The majority are small installations on residential dwellings. Some are larger installations on industrial or institutional buildings. Building permits have been issued for rooftop solar installations that have a surface area greater than or equal to 5 square meters (53.8 square feet) or if it constitutes a material alteration to the building. To date, no issues have been noted relating to rooftop solar installations.

City of Mississauga Plans

The Living Green Master Plan recognizes the importance of Mississauga's energy future and directs Mississauga to: assess energy efficiency and renewable fuel strategies; and continue to identify, invest in and implement renewable energy actions identified in the City's Corporate Energy Management Plan.

The Economic Development Strategy: Building on Success highlights the City's positive position through its economic base and skilled workforce to capitalize on the opportunities that lie in the emergence of the green economy, and the increasing importance of the use and development of clean technologies and their implications for sustainable growth. These opportunities will advance the City's economic future, both in terms of environmental stewardship and in its support for the incubation and production of new green technologies and services.

In addition, the new Mississauga Official Plan, which has been adopted by City of Mississauga Council and Region of Peel Council, but which is currently under appeal, highlights Mississauga's support for renewable energy systems by:

- promoting renewable energy systems; and
- working jointly with other levels of government and agencies to investigate the need, feasibility, implications and suitable locations for renewable energy projects and to promote local clean energy generation, where appropriate.

Other Municipalities

The Municipality of Strathroy-Caradoc Council passed two Resolutions on May 7, 2012 supporting individual rooftop solar projects.

The City of Vaughan Committee of the Whole approved a Recommendation on June 5, 2012 that City of Vaughan Council:

- endorse a resolution to support individual solar rooftop projects making application under the FIT 2.0 program; and
- give staff the authority to provide applicants a copy of the resolutions where the application meets certain criteria.

This will involve staff reviewing each application and issuing individual resolutions. The criteria stipulate that the rooftop solar project be for industrial applications, public use buildings, or site plans with solar rooftop applications that have been approved by the City of Vaughan. At the time of writing this report, City of Vaughan Council had not considered the Recommendation.

The City of Brampton Committee of Council passed a Resolution on June 13, 2012 supporting eight rooftop solar photovoltaic projects that are subject to applications under the FIT program.

There are several other municipalities in Ontario that are considering council resolutions for applications under the FIT program, but, to - date, have not passed a resolution.

PRESENT STATUS:

The City of Mississauga has received requests from three solar energy companies, involving approximately ten different locations, for Council to pass a resolution in support of their rooftop solar projects. It is anticipated that, once the Province's FIT 2.0 program is released and the application window is opened, the City will receive more requests for Council resolutions.

COMMENTS:

Presently, all of the requests received for a City of Mississauga Council support resolution have been for rooftop solar installations.

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This is attributed to the fact that there are many large flat roofs in Mississauga, primarily in industrial areas, and there are no large tracks of land suitable for ground mounted solar farms. In addition, average wind speeds in Mississauga are relatively low and do not provide enough capacity to make wind generation profitable. This report therefore proposes that a Council support resolution for FIT applications only be applicable to rooftop solar projects.

The draft FIT 2.0 program provides municipalities the opportunity to provide a council support resolution for FIT applications. This gives municipalities the ability to let the OPA know whether they support the project.

City staff has consulted with all City departments, the Region of Peel, other municipalities, the Environmental Advisory Committee, the OPA, and the solar industry. Although certain structural requirements are addressed through the building permit application, there are two issues that are not covered under the Building Code and one issue that should be highlighted early in the project:

- 1. Glare: The types of rooftop solar applications under the FIT program generally use anti-reflective solar photovoltaic systems. However, Mississauga is in an area of influence for both Toronto Pearson International Airport and Billy Bishop Toronto City Airport. Glare from solar panels could pose a risk to airplanes taking off and landing. As such, it should be stipulated that anti-glare surfaces be used.
- 2. Fire safety: In an emergency situation, access to the roof may be necessary. During a fire, ventilation may be required and emergency services staff may need to create holes in the roof. Access on the roof may also be required with enough space for emergency services staff to move around. While accessing the roof, live electricity may pose a risk. A main cut-off or breaker, that is readily accessible to emergency services, will assist in reducing risk during an emergency situation. However, the solar system may be live as long as the solar panels are producing electricity. Emergency services staff are trained to take appropriate measures around live solar panels. However, there

should be signage at the main breaker advising that the solar panels may still be live even if the breaker is off.

3. Heritage buildings: The types of rooftop solar applications received under the FIT program are generally on large buildings with flat roofs. Therefore, it is anticipated that few, if any, applications under the FIT program would be proposed on heritage buildings. However, should a situation arise where a rooftop solar installation is proposed on a heritage building, the applicant should be advised that the *Ontario Heritage Act* applies and therefore a permit is required for the alteration of the building prior to the building permit being issued.

There are two types of council resolutions proposed under the draft FIT 2.0 rules:

- a blanket support resolution which would cover all applications;
 and
- a project-specific support resolution.

In order to issue project-specific Council support resolutions, each application will have to be reviewed in advance of the building permit application. In order to review each application, criteria and a process for review would have to be established. This will have resource implications. Other than the factors noted above (glare, fire), the building permit process will ensure safety requirements are met and other applicable laws such as the *Ontario Heritage Act* are addressed. There have been several large rooftop solar projects installed in Mississauga and no issues have been noted to date. However, endorsing the proponent of a specific project could present some liability issues for the City should there be issues with the installation.

A blanket resolution supporting rooftop solar installations provides the opportunity for the City to provide support, in principle, for renewable energy production, while highlighting to the applicant and the OPA specific criteria that is important to Mississauga, but not covered as part of the building permit process. The proposed blanket Resolution, contained in Appendix 1, provides support for rooftop solar projects

subject to the glare and fire issues being addressed and highlights the need to obtain a heritage permit, if required. These criteria have been vetted by all City departments to ensure that rooftop solar applications under the FIT program will be compatible in Mississauga.

STRATEGIC PLAN:

The Strategic Plan stipulates that renewable energy is important to ensure Mississauga's sustainability. Action 1 of the Green Pillar states that Mississauga "will pursue renewable energy production and use to reduce green house gas emissions, improve air quality and protect natural resources."

Support of renewable energy projects, specifically rooftop solar installations, helps to achieve the goals of the Strategic Plan.

FINANCIAL IMPACT:

There are no financial impacts of a blanket Council resolution in support of rooftop solar installations.

Where the rooftop solar installation is on a City-owned building, there will be revenue generated from the lease. The amount generated for each building will vary depending on the type and size of the installation.

CONCLUSION:

Council support of rooftop solar renewable energy projects supports the directions in the Strategic Plan, the Living Green Master Plan, the Economic Development Strategy and the Official Plan, and will clearly demonstrate the desire for Mississauga to be recognized for its innovation and leadership in an emerging and green economy.

Although the 2009 Green Energy Act removed Planning Act approvals from renewable energy projects, the draft FIT 2.0 program provides municipalities the opportunity to state whether they support renewable energy projects through council resolutions. Mississauga has received requests for Council resolutions only for rooftop solar installations. By providing a Council resolution supporting rooftop solar projects, in principle, Mississauga has the opportunity to show support for rooftop solar projects while highlighting factors that are not covered under the building permit process relating to glare, fire and heritage buildings.

ATTACHMENTS:

Appendix 1: Proposed Motion for City of Mississauga Council

Blanket Support Resolution



Paul A. Mitcham, P.Eng., MBA Commissioner of Community Services

Prepared By: Mary Bracken, Environmental Specialist

Proposed Motion for CITY OF MISSISSAUGA COUNCIL SUPPORT RESOLUTION FOR ROOFTOP SOLAR GENERATION PROJECTS

RESOLUTION NO.:	DATE	.	
	•		
WHEREAS the Province's Feed-in	Tariff (FIT) program encourages	the construction and	
operation of rooftop solar generation projects ("Rooftop Solar Projects")			

AND WHEREAS it is likely that one or more Rooftop Solar Projects will be considered for construction and operation in the City of Mississauga;

AND WHEREAS, pursuant to the rules governing the FIT program (the "FIT Rules"), applicants whose Rooftop Solar Projects receive the support of municipalities will be awarded priority points, which may result in these applicants being offered a FIT contract by the Province prior to other persons applying for FIT contracts;

AND WHEREAS the *Green Energy Act*, 2009, S.O. 2009, c.12, as amended, stipulates that a municipal Official Plan and Zoning By-law does not apply to a renewable energy undertaking;

AND WHEREAS the Building Code Act, 1992, S.O. 1992, c.23, as amended, applies to renewable energy projects and, as such, each Rooftop Solar Project will require a building permit issued by the City of Mississauga Building Division;

AND WHEREAS, pursuant to the Ontario Heritage Act, R.S.O. 1990, c.0.18, as amended, each Rooftop Solar Project that is proposed to be located on a property listed on the City of Mississauga's Heritage Register or designated as a heritage property will require a Heritage Permit from the City of Mississauga prior to work commencing on such properties;

NOW THEREFORE BE IT RESOLVED THAT:

The Council of the City of Mississauga supports, in principle, the construction and operation of Rooftop Solar Projects in the City of Mississauga, including but not limited to Rooftop Solar Projects on City-owned buildings, subject to the following:

- 1. That all solar panels have an anti-reflective surface;
- 2. That fire safety issues be addressed to the satisfaction of the City of Mississanga's Fire and Emergency Services division with respect to emergency situations; and
- That each Rooftop Solar Project shall have complied with all applicable laws and regulations, including but not limited to applicable City of Mississauga policies and procedures.

And further, that this Resolution's sole purpose is to enable the participants in the FIT program to receive priority points under the FIT program, and that this Resolution may not be used for the

purpose of any other form of municipal approval in relation to a FIT application or a Rooftop Solar Project or any other FIT project or for any other purpose.

And further, that Council support in principle shall lapse twelve (12) months after its adoption by Council.

Revised Motion for CITY OF MISSISSAUGA COUNCIL SUPPORT RESOLUTION FOR ROOFTOP SOLAR GENERATION PROJECTS

RESOLUTION NO.:	DATE:
WHEREAS the Province's Feed-in Tariff (FIT operation of rooftop solar generation projects ("Ro) Program encourages the construction and oftop Solar Projects");
AND WHEREAS it is likely that one or more F construction and operation in the City of Mississau	Rooftop Solar Projects will be considered for ga;
AND WHEREAS, pursuant to the rules governing whose Rooftop Solar Projects receive the formal supriority points, which may result in these applicant prior to other persons applying for FIT contracts;	upport of local municipalities will be awarded
AND WHEREAS the Green Energy Act, 2009, S municipal Official Plan and Zoning By-law does no	O. 2009, c.12, as amended, stipulates that a ot apply to a renewable energy undertaking;
AND WHEREAS the <i>Building Code Act</i> , 1992 renewable energy projects and, as such, each Rooft issued by the City of Mississauga Planning and Bui	op Solar Project will require a building permit
AND WHEREAS, pursuant to the <i>Ontario Heritag</i> Rooftop Solar Project that is proposed to be lower Mississauga's Heritage Register or designated as Permit from the City of Mississauga prior to work contacts.	ocated on a property listed on the City of a heritage property will require a Heritage
NOW THEREFORE BE IT RESOLVED THAT:	
The Council of the City of Mississauga support operation of Rooftop Solar Projects anywhere in imited to Rooftop Solar Projects on City-owned but	the City of Mississauga, including but not
And further, that this Resolution's sole purpose is to receive priority points under the FIT Program, and purpose of any other form of municipal approval is solar Project or for any other purpose.	d that this Resolution may not be used for the
And further, that Council support shall lapse twelve	(12) months after its adoption by Council.