

Request for Recommendation

City Council





Type of Decision							
Meeting Date	September 9, 2014			Report Date	September 8, 2014		
Decision Requested		Yes	No	Priority		High	Low
	Direction Only			Type of Meeting		Open	Closed

Report Title
Feed-in-Tariff Contract for 3 Rooftop Solar Projects

Budget Impact/Policy Implication	Recommendation
<p>This report has been reviewed by the Finance Division and the funding source has been identified.</p>	<p>For information</p>
<p>Background Attached</p>	<p>Recommendation Continued</p>

Recommended by the Department
<p>Paul Baskcomb Acting General Manager of Growth & Development</p>

Recommended by the C.A.O.
<p>Doug Nadorozny Chief Administrative Officer</p>

Report Prepared By	Division Review
 Sajeesh Shivshankaran Manager of Energy Initiatives	 Danielle Braney Director of Asset Services

Subsequent to the City of Greater Sudbury's application to the Ontario Power Authority for rooftop solar projects in 2013, the City has just received an Offer of a Feed-in-Tariff contract for 3 sites. This is an opportunity for the City to participate in renewable energy initiatives, generate additional revenues and bring clean sources of energy into the supply mix. The report is before you as the response to the Offers is time sensitive.

On October 8, 2013 Council passed a blanket support resolution for rooftop solar installations anywhere in the City of Greater Sudbury. This resolution allowed the City to make application to the Ontario Power Authority (OPA) for the feasibility of installing solar panels at the following locations:

1. Pioneer Manor Long Term Care Facility;
2. Gerry McCrory Countryside Sports Complex;
3. Transit/Fleet Garage; and
4. Sudbury Wastewater Treatment Plant.

An initial review by the OPA determined that the Transit/Garage would not be eligible for a grid connection. The City did not pursue the application for an installation at the Sudbury Wastewater Treatment Plant as structural analysis of the roof could not be confirmed without costly testing. An application for Tom Davies Square was submitted as a substitute and was found to be eligible.

On September 3, 2014, the City received from the OPA an offer of a FIT Contract for the following 3 projects:

1. Pioneer Manor Long Term Care Facility;
2. Gerry McCrory Countryside Sports Complex; and
3. Tom Davies Square.

The Offers must be signed and returned to the OPA within 20 Business Days of the date of the letter. If the City fails to comply, the offer will be revoked and the application will be deemed to be withdrawn. The executed offer must be accompanied by a Compliance and Performance Security of \$2,825.00.

There are still a few steps to the process before the projects can go ahead. The OPA will issue a Notice to Proceed once the City provides a Connection Impact Assessment (approximate cost \$6,000 per site), a Metering Plan, the Renewable Energy Approval and registration with the MOE, a Financing Plan in a Prescribed Form and additional Completion and Performance Security of \$2,825.00.

The following provides financial information for all three solar rooftop project sites. The cost and revenue information was extracted from the report titled "Greater Sudbury: Solar Feasibility Study Technical Report" prepared by Arborus Consulting. The capital and operating costs were prepared in 2013 dollars and have been inflated by 2% to estimate in 2014 dollars. In addition, an additional 20% for budgeting purposes as the estimates are considered preliminary.

Total estimated capital costs	\$2.2 million
Total estimated annual revenue from energy produced	\$266,900
Total estimated annual operating costs	\$16,700
Net estimated annual revenue	\$250,200
Payback in years	8.8 years

Staff will complete additional financial analysis for these three sites along with funding sources (ie. incorporate within capital budget, internal financing with debt repayments to be offset by the annual net revenue, etc) to be presented to Council at a future date.

If internal financing is used to fund the capital costs, then the estimated annual debt repayments is shown below that will reduce the net contribution to the operating budget:

Annual debt repayments (based on 3.7% interest rate over 20 years)	\$157,800
Net Annual Contribution to Operating Budget after debt repayments	\$92,400
Total Profit over 20 years (term of revenue contract)	\$1.8 million
Payback in years	12.6 years

The payback in years for the Countryside Arena and Pioneer Manor projects are respectively estimated at 12.58 and 12.04 both with a contract capacity of 245 kW, whereas the payback period for the TDS will be 14.5 years due to its lower generation capacity of 75 kW.

If revenues are 15% higher than estimated, the projects will generate approximately \$2.6M over 20 years with a payback of 10.9 years. If revenues are 15% lower than estimated, the projects will generate approximately \$1.04M over 20 years with a payback of 15 years. These amounts are based on internal debt financing for all 3 sites.

The funding for the security deposits will be through the energy conservation account from the 2014 Capital Budget in Assets section and/or to be funded by the operating department.

Risk factors associated with the projects include: revenue can be lower than estimated by the consultants' report, equipment can fail before the end of the revenue contract term or have higher repairs/maintenance costs than estimated.

A Bylaw also appears on the addendum to authorize the CAO to enter into the Feed-in Tariff Contracts.

Request for Decision

Rooftop Solar Projects

Presented To: City Council

Presented: Tuesday, Oct 08, 2013

Report Date Wednesday, Oct 02, 2013

Type: Managers' Reports

Recommendation

WHEREAS the City of Greater Sudbury proposes to construct and operate Rooftop Solar Photovoltaic Projects (the "Projects") in the City of Greater Sudbury as an Applicant under the Province's FIT Program on Lands described as follows:

1. Pioneer Manor Long Term Care Facility; 2. Gerry McCrory Countryside Sports Complex; 3. Transit/Fleet Garage; 4. Sudbury Wastewater Treatment Plant.

AND WHEREAS other Applicants have been and will continue to propose to construct and operate Rooftop Photovoltaic Projects (the "Projects") in the City of Greater Sudbury under the Province's FIT Program;

AND WHEREAS Applicants have requested that Council of the City of Greater Sudbury indicate by resolution Council's support for the construction and operation of the Projects in the City of Greater Sudbury;

AND WHEREAS, pursuant to the rules governing the FIT Program (the "FIT Rules"), Applications whose Projects receive the formal support of Local Municipalities will be awarded Priority Points, which may result in the Applicant being offered a FIT Contract prior to other persons applying for FIT Contracts;

NOW THEREFORE BE IT RESOLVED THAT: Council of the City of Greater Sudbury supports the construction and operation of the Projects anywhere in the City of Greater Sudbury.

This resolution's sole purpose is to enable the Applicant to receive Priority Points under the FIT Program and may not be used for the purpose of any other form of municipal approval in relation to the Application or Project or any other purpose.

Finance Implications

No capital funding has been identified and business cases will be undertaken and brought back to Council for consideration and approval prior to proceeding with any project.

Signed By

Report Prepared By

Sajeev Shivshankaran
Manager of Energy Initiatives
Digitally Signed Oct 2, 13

Division Review

Danielle Braney
Director of Asset Services
Digitally Signed Oct 2, 13

Recommended by the Department

Paul Baskcomb
Acting General Manager of Growth & Development/Planning Director
Digitally Signed Oct 2, 13

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Oct 2, 13

Background

Ontario Power Authority's FIT (Feed-in-Tariff) Program encourages the construction and operation of rooftop solar, ground mount solar, bio-energy and on-shore wind generation projects. The new version of FIT is favourable towards Municipalities and Public sector organizations by awarding priority points; City Council resolution for the particular project enables to secure the Priority points. This increases the chances of securing a FIT contract for the Sudbury-area Applicants with OPA for 20 years at a pre-determined rate. The FIT-3 application window is expected to open in October 2013 for a period of 30 days only.

Business cases for the projects will be undertaken and brought back to Council for consideration and approval prior to proceeding with any municipal project initiated by the City of Greater Sudbury.

As a point of information, staff had considered solar projects on some of the facilities in the south end of the City in previous years, however, a connection to the grid was not possible. Since then, necessary upgrades were effected to the Martindale Substation to accept additional connections.

DETAILS:

The Ontario Power Authority (OPA) is a not-for-profit corporation with a mandate from the Ontario government to ensure a reliable, sustainable supply of electricity for the province.

It has three key areas of focus:

- leading and coordinating conservation efforts across the province
- planning the power system for the long term
- ensuring development of needed generation resources

The Ontario Power Authority (OPA) is responsible for designing and implementing the FIT (Feed- in-Tariff) Program, which include the program rules, price schedule, contracts, registration, application and contracting processes as well as ongoing contract management activities.

SMALL FIT CONTRACTS OFFERED

Ontario's clean energy economy continues to grow as the Ontario Power Authority (OPA) offers 951 new Small Feed-in Tariff (FIT) renewable energy contracts. These contracts represent 146.5 megawatts (MW) of power, enough to power more than 21,000 homes.

Over 98 percent of the successful applications received municipal council support resolutions. Most of these contract offers are for solar photovoltaic (PV) projects, including 934 solar PV projects, 16 bioenergy projects and one waterpower project. In total, project developers are expected to invest over \$750 million in the Ontario economy, and the projects are expected to result in 2,200 jobs for Ontarians.

The projects announced lately include 46 MW or 219 projects with Aboriginal participation and 27.8 MW or 136 projects with community participation.

These contracts are being offered to successful applicants who applied during the Small FIT application period from December 14, 2012, to January 18, 2013. The OPA was authorized to offer up to 200 MW of contracts to these applicants; the remaining 53.5 MW of capacity that was not contracted in this round will be added to the procurement target for this fall's Small FIT application period. Details for this next window will be posted on the FIT website when they are available. ([Source: OPA website](#))

Approximately 70% of Ontario's electricity is generated by Ontario Power Generation at its hydroelectric, nuclear and fossil fuel stations. Independent power producers generate the remaining 30%. (*Source: OPA website*)

FIT (Feed in Tariff) Program :

The Ontario Power Authority (OPA) has created a program that encourages the development of renewable energy projects across Ontario. The program delivers significant benefits to project developers - including communities and Aboriginal groups - as well as equipment suppliers and installers, consumers and the overall provincial economy. The Ontario Power Authority (OPA) is now accepting Small FIT applications for renewable energy projects with a proposed capacity of more than 10 kilowatts and up to 500 kilowatts (defined in the FIT Rules as Small FIT Projects).

The prices for delivered power to the grid are designed to cover project costs and provide a reasonable rate of return on the investment over the term of the contract. The FIT Version 3.0 program from OPA is open for applicants and is applicable for construction and operation of rooftop solar, ground mount solar, bioenergy and on-shore wind generation projects, where in, OPA issues a 20 year contract with the participant for the purchase of the power at a predetermined rate.

One of the core goals of the FIT Program is to encourage the development of community-based renewable energy projects. This is done through the creation of a community contract capacity set-aside, reduced security payments, additional price incentives, the granting of priority points and opportunities for funding through the Community Energy Partnerships Program.

The application review process, all remaining eligible applications will be ranked based on the number of priority points they have received, as well as by timestamp. An application's timestamp will determine which application is screened for connection first if two or more applications have the same number of priority points. (*Source: OPA website*)

Municipal Council Support

The OPA screens the Applicants for their proposed project and its viability in order to ensure that the grid capacity for renewable energy is well spent. OPA considers various aspects such as financial capability, design thoroughness, proposed project timeline etc. on which it issues merit points.

One of the aspects that the OPA considers to award priority points is for local Municipal support for renewable energy projects. OPA favours such proponents with priority points on basis of Municipal Council support for these renewable generation projects.

If a local municipality does pass a resolution support in this effect, the resolution will only allow the applicant to obtain priority points under the FIT program. Projects that receive a contract from the OPA will still need to obtain any required approvals prior to construction (building permits, REA, etc.). The Council's support resolution for renewable projects in the City of Greater Sudbury will give the Applicants the much needed extra priority for securing the FIT (Feed-in-tariff) contract. (*Source: OPA website*)

This recommendation is for a Council blanket support resolution for rooftop solar photovoltaic anywhere in the City of Greater Sudbury. The blanket support resolution would not apply to ground-mount solar projects or any other type of renewable energy project encouraged by the Province's FIT Program.