

Clause No. 6 in Report No. 8 of the Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on April 17, 2014.

**6**  
**CONTRACT AWARD FOR SOLAR PHOTOVOLTAIC  
RENEWABLE ENERGY PROJECT**

**Committee of the Whole recommends adoption of the following recommendations contained in the report dated March 27, 2014 from the Commissioner of Corporate Services:**

**1. RECOMMENDATIONS**

It is recommended that:

1. Council approve the award of the contract for the design, supply and installation of grid-tied solar photovoltaic systems for two Regional facilities (Transportation and Works Operations Centre at 90 Bales Drive, East Gwillimbury and the Georgina Water Treatment Plant at 27135 Kennedy Road, Georgina) to Ainsworth Inc. at a total cost of \$997,076 excluding HST.
2. The Commissioner of Corporate Services be authorized to execute the contract on behalf of the Region.

**2. PURPOSE**

The Region was awarded Feed-In Tariff (FIT) contracts by the Ontario Power Authority (OPA) for rooftop solar photovoltaic (PV) systems at two locations, the Transportation and Works Operations Centre at 90 Bales Drive in East Gwillimbury and the Georgina Water Treatment Plant at 27135 Kennedy Road in Georgina.

Council approval for award of the contract is needed because the applicable RFP was cancelled and a contract price negotiated with the proponent, Ainsworth Inc.

### **3. BACKGROUND**

#### **The Region submitted Feed-In Tariff applications for solar photovoltaic systems at four sites in 2011**

The FIT program offers preferential electricity rates for 20 years for power generated from renewable sources. After conducting a feasibility study to short-list the most suitable Regional locations for medium-size solar PV arrays, the Region submitted FIT applications for four sites in December 2011.

While the applications were being processed, the Region issued Request for Proposal P-12-06 for supply and installation of the solar arrays. In October 2012, Council authorized award for Request for Proposal P-12-06, subject to the approval by the Ontario Power Authority in the form of Feed-In Tariff contracts.

In the fall of 2012, the OPA announced a review of the FIT program which resulted in rule changes and the cancellation of the previous application round. This meant the Region had to cancel the award of P-12-06 and resubmit the FIT applications for the four sites in January 2013.

#### **The Region was awarded FIT contracts by the Ontario Power Authority for two sites in August 2013**

In August 2013, the Region was notified that two of the four sites would be awarded FIT contracts. The successful sites were the Transportation and Works Operations Centre at 90 Bales Drive, East Gwillimbury and the Georgina Water Treatment Plant at 27135 Kennedy Road, Georgina. At 90 kW and 75 kW system size, respectively, the two systems will generate enough emission-free energy to supply the electricity needs of 22 average-sized homes (the other two sites will be revisited during a future FIT application round if the business case is still promising).

FIT contracts for the two successful sites were executed by the Region and the Ontario Power Authority with a contract date of August 27, 2013. The projects must reach commercial operation by March 26, 2015.

#### **The Request for Proposal resulted in only one bid submission that passed the technical evaluation**

The Region issued a new Request for Proposal P-13-92 for the supply and installation of solar PV systems at the two facilities, closing on December 12, 2013. Three bids were received. One bid, from Ainsworth Inc., passed technical evaluation, but it exceeded the project budget of \$1.1 million. The other two bids were disqualified by the Bid Review Committee.

In consultation with Legal Services and Supplies and Services, the RFP was cancelled and staff proceeded to successfully negotiate modified specifications and a reduction in

price of nearly \$200,000 with Ainsworth Inc., resulting in the recommended award price of \$997,076 excluding HST.

#### 4. ANALYSIS AND OPTIONS

##### **The project has an aggregate 8.5-year simple payback**

Table 1 below shows a summary of the business case for installing solar PV systems at the two sites. The 8.5-year aggregate simple payback is the shortest the Region has achieved to date for any type of renewable energy.

**Table 1**  
Business Case for Solar PV Project at Two Regional Facilities

<b>Location</b>	<b>Cost</b>	<b>Annual Revenue</b>	<b>Simple Payback in years</b>	<b>Net Present Value</b>
90 kW at Transportation & Works Operations Centre at 90 Bales Drive, East Gwillimbury	\$609,507	\$ 65,000	9.4	\$200,500
75 kW at Georgina Water Treatment Plant at 27135 Kennedy Road, Georgina	\$387,569	\$ 52,000	7.5	\$262,400
<b>Total</b>	<b>\$997,076</b>	<b>\$117,000</b>	<b>8.5</b>	<b>\$462,900</b>

Notes:

1. Revenue is calculated at offered FIT contract rate of \$0.548/kWh less an 8% allowance for Operations & Maintenance.
2. Payback is longer for 90 Bales Drive due to the need for a more extensive racking (mounting) system. The 8.5-year payback is for the two projects added together.
3. Net present value is the amount that revenues over the 20-year FIT contract (at a 5% discount rate) exceed the implementation cost.

#### **Link to key Council-approved plans**

##### **From Vision to Results: 2011 to 2015 Strategic Plan**

Priority Area – Continue to Deliver and Sustain Critical Infrastructure

Continue to partner with all levels of government to facilitate the delivery of environmentally-sustainable infrastructure

The Feed-in Tariff program is operated by a provincial agency, requires support from local municipal government and strengthens energy infrastructure.

Priority Area – Manage the Region’s Finances Prudently

Practice sound Fiscal Management

The 8.5-year project payback is the shortest the Region has achieved to date for any type of renewable energy.

### **York Region Sustainability Strategy**

Priority Area - Sustainable Natural Environment

Expand on energy efficiency initiatives and pursue other forms of renewable energy (i.e. solar, wind).

### **Vision 2051**

Priority Area - Living Sustainably

Reduce dependency on non-renewable, carbon-based energy sources by diversifying local energy, prioritizing local energy generation and distribution and using renewable and alternative energy sources.

Under the Feed-in Tariff rules, the OPA will retain the environmental attributes associated with the projects during the 20-year contract term. There will be a net environmental benefit from reduced greenhouse gas emissions, but the Region will not be able to sell the credits.

## **5. FINANCIAL IMPLICATIONS**

### **The Property Services capital budget for 2014 includes the solar photovoltaic projects**

The two solar PV systems have an aggregate simple payback of 8.5 years. The net present value (surplus) of FIT revenues over implementation cost is \$463,000. The PV systems are expected to continue generating valuable green energy beyond the 20-year FIT contract term.

A budget of \$1,100,000 was approved for solar implementation in 2014.

Should Council decide not to award the installation contract at this time, there may be insufficient time to retender and construct before the OPA deadline of March 26, 2015. Also, if the process is terminated, the Region will forfeit contract security posted with the OPA in the amount of \$8,250.

## **6. LOCAL MUNICIPAL IMPACT**

### **The local host municipalities provided their support of the projects**

The Region was successful in obtaining formal support from the local host municipalities, the Town of East Gwillimbury and the Town of Georgina, in the form of Support Resolutions.

## **7. CONCLUSION**

### **Council approval of the recommendations in this report is required to ensure the solar PV systems can be installed by the OPA deadline of March 26, 2015**

The Region is requesting the award of contract to Ainsworth Inc. for \$997,076 so that the project can be constructed within the OPA deadline of March 26, 2015 for Commercial Operations.

For more information on this report, please contact René Masad, Director, Property Services Branch at Ext. 71684.

The Senior Management Group has reviewed this report.