

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** December 17, 2008

**SUBJECT:** PROCUREMENT AUTHORIZATION - PROVISION OF  
ECOLOGO<sup>M</sup> CERTIFIED GREEN POWER

## **ACTION ITEM**

---

### **RECOMMENDATION**

It is recommended that the Commission approve the issuance of a purchase order to Direct Energy Marketing Ltd. in the total upset limit amount of \$2,110,000 for a three year period from January 1, 2009 to December 31, 2011 for the provision of Ecologo<sup>M</sup> Certified Green Power, subject to acceptable negotiations regarding the terms and conditions.

### **FUNDING**

Sufficient funds have been included in the 2009 TTC Operating Budget, approved by the Commission on September 18, 2008, and will be included in future Operating Budgets as required.

### **BACKGROUND**

At its meeting of December 6, 2007 the Commission approved a report titled, "TTC Environmental Plan – Initiatives and Implementation, which directed staff to purchase 25% of the TTC's electricity from renewable or sustainable sources by 2012, subject to approval of the funds required. The Commission intends to phase in the purchase of green power over the next four years. TTC staff will determine the exact amount of green power to be purchased in the fourth year based on TTC electricity consumption and the amount of renewable power available in the Ontario electricity grid at that time.

As the City has a similar mandate to purchase green power, staff worked in conjunction with staff from the City to begin to develop a long term approach to the purchase of Green Power. The commitment to purchase 25% of its electricity requirements from green sources is based on the desire to reduce the contribution to greenhouse gases and to accelerate the development of new, green and renewable energy in Ontario. When purchasing significant amounts of green electricity it is likely the purchases will lead to the development of new green power generation to reduce

conventional generation. The public sector as well as the private sector organizations will have to create the market demand for renewable power sources.

TTC consumed a total of approximately 439 million kilowatt-hours (kWh) of electricity in 2007 at its different fixed facilities and from a network of subway, rapid transit, and streetcars. TTC's electricity consumption is projected to increase to approximately 451 million kWh in 2009. TTC service will be increased in the next three years and electricity consumption will be adjusted accordingly. Based on the projected 451 million kWh consumed in 2009, approximately 113 million kWh represents the target of 25% of total TTC annual electricity consumption.

The services of a consultant, The Delphi Group (Delphi), were retained to work with the City, the TTC and the other ABC's to develop a strategy to source 25% of the electricity needs from renewable energy sources. This strategy could include investing in green power generating facilities or signing long term agreements with companies for the supply of green power from facilities yet to be built. While a longer term strategy is still in development, it was determined that it would be necessary for the TTC to arrange a shorter term contract (i.e. 3 years) in order to secure its green power requirements over the period 2009 to 2011. This would provide sufficient time to develop a long-term strategy for the purchase of green power in conjunction with the City and other ABC's, which could include the supply of green power from Toronto Hydro and other sources.

## **DISCUSSION**

A Request for Proposal (RFP) was issued to eleven companies in addition to a public advertisement on the TTC web site on October 24, 2008 for the supply of green power. The RFP requested that any standard agreement the proponent proposes to be executed prior to award of the contract, be submitted with the proposal and also contained a clause indicating that TTC reserves the right to negotiate acceptable terms and conditions with proponents who the Commission has determined to have offered the best overall proposals.

The RFP requested pricing for the supply of green power for 5% of the Commission's total electricity requirements for 2009 with the options to purchase 10% in 2010 and 15% in 2011 with the options to be exercised at the Commission's sole discretion.

Proposals were requested for the Provision of Ecologo<sup>M</sup> Certified Green Power generated within the Province of Ontario. "EcoLogo<sup>M</sup> Certified" means the electricity generated is certified as green power designated by Environment Canada's Environmental Choice Program. All EcoLogo<sup>M</sup> certified power, regardless of the nature of generation facility (i.e. wind, solar, geothermal, etc.), is classified by Type. The Type designates the age of the generating facility as follows:

- Type I representing the oldest facilities (began operations prior to 1991);
- Type II newer (began operations from January 1, 1991 to March 31, 2001); and
- Type III the newest (began operations on or after April 1, 2001).

Proponents were requested to provide a unit price premium per kilowatt-hour (kWh) based on three options:

- Option 1 was a blend of Type II and III green power with a minimum of 20% Type III,
- Option 2 was for 100% Type II green power, and
- Option 3 was for 100% Type III green power.

Two companies submitted proposals as summarized on Appendix A, which resulted in one bid for each of the three options.

Direct Energy Marketing Limited (Direct Energy) submitted pricing for Option 2 only (100% Type II green power), which is the lowest priced option. Direct Energy's supplier (Brookfield Renewable Power) provides 100% clean, hydro power from multiple existing low-impact water facilities across Ontario. In addition, Direct Energy has stated that it will invest 10% of the contract price in Ontario for the development of new Type III projects / facilities. Direct Energy also submitted agreements including their terms and conditions.

Option 2 addresses TTC's target to initiate the purchase of 25% of TTC's electricity from renewable or sustainable sources by 2012 and would also support the EcoLogo certified infrastructure (Current & Future) and the production of green power. Staff is recommending the award of the contract to Direct Energy for a three year term in the upset limit amount of \$2,107,224 as it is the lowest priced option and will result in 10% of the premium being directed to the development of new Type III projects / facilities in Ontario.

Bullfrog Power Inc. (Bullfrog) submitted pricing for Option 1 (80% Type II and 20% Type III green power) and for Option 3 (100% Type III green power), which were the second and third lowest prices, respectively. Bullfrog also submitted a discount of approximately 10% on the total price for Option 1 if the TTC entered into a three-year agreement, rather than a one year agreement with two optional years. Bullfrog also submitted their form of agreement for the purchase of the green power.

Bullfrog's pricing for Option 1 meets the Commission's requirements and would contribute 20% of the contract price to the generation of Type III power, however it is 64% higher than Direct Energy's price based on a three year term and as a result, is not recommended due to its higher price. Bullfrog's price for Option 3 is significantly higher than the other two options and was not considered further.

Direct Energy submitted agreements including their terms and conditions which are currently being reviewed and negotiated by staff. The contract will be awarded subject to Commission approval and negotiating acceptable terms and conditions with Direct Energy.

During January 2008 to September 2008, the average unit price paid by TTC for regular electricity including all costs was \$0.0926 per kWh including commodity and other regulated charges (not including GST). Assuming that this pricing remains the same in 2009, the Commission will pay a total of \$0.1074 / kWh (not including GST) for 5% of its power usage in 2009 based on this award.

**JUSTIFICATION**

The award of this contract to Direct Energy addresses the purchase of approximately 15% electricity from renewable or sustainable sources and will provide time for staff to develop a long term strategy for the purchase of green power, which will cover the target of 25% by 2012 in conjunction with the City of Toronto.

-----

November 28, 2008

9-59

Attachment: Appendix A

## Appendix A

### PROCUREMENT AUTHORIZATION PROVISION OF ECOLOGO<sup>M</sup> CERTIFIED GREEN POWER

#### Proposal Summary

OPTION	COMPANY	TOTAL COST (GST included)		% of cost to be invested in Type III renewable energy projects in Ontario
		YEAR 1 (for 22.6M kWh per year)	3 YEAR TOTAL (for 135.6M kWh over 3 years)	
OPTION 1 80% Type II & 20% Type III	Bullfrog Power Inc.	\$652,575.00	\$3,826,462.50	20%
		\$575,452.50	\$3,452,715.00 **	
OPTION 2 100% Type II	Direct Energy Marketing Ltd.	\$351,204.00	\$2,107,224.00 *	10%
OPTION 3 100% Type III	Bullfrog Power Inc.	\$2,135,700.00	\$12,814,200.00	100%

\* Recommended for award.

\*\* Bullfrog offered a 10% discount based on the award of a contract for a 3 year period.