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June 10, 2008

**ACTION REQUIRED**

To: Board of Governors of Exhibition Place

From: Dianne Young, CEO

Subject: **Results of Request for Proposals for Photovoltaic Generation Plant**

Summary:

In 2004, the Board adopted an Environmental Plan that had as its main objective net energy self-sufficiency by the end of 2010. A 2007 consultant study recommended that in order to achieve this target it would be necessary to undertake substantial energy efficiency projects across the grounds and at the same time, expand the photovoltaic system by 2.3 Megawatts.

In November 2006, the Board commissioned a 100 kW solar photovoltaic system on the roof of the Horse Palace. This \$1.1 million project was only made possible because of the funding from the Federation of Canadian Municipalities (\$250,000 grant), Toronto Atmospheric Funds (\$250,000 grant) and the Better Buildings Partnership (\$600,000 interest free loan). While this installation has been accepted within the provincial RESOP program which results in the payment to the Board of \$0.42 per kilowatt, the cost-benefits of this roof-top photovoltaics are still marginal.

Knowing that there was not sufficient funding available to the Board to fund a one megawatt PV system, staff started to explore the option of forming a long-term relationship with the private sector to construct, maintain and operate a one megawatt PV plant at Exhibition Place. The electricity from this installation would (similar to the wind turbine) be fed into the Board's electrical grid and used solely within the grounds.

The Request for Proposals (RFP) requesting proposals from the private sector to construct and manage a photovoltaic generation plant on specified roofs (Better Living Centre, Horse Palace and Automotive Building) was released through the City of Toronto Purchasing Division on March 6, 2008 with a deadline for submissions of April 30, 2008. Proposals were received from Mondial Energy Inc., RESCo Energy Inc., SunEdison Canada and Sundurance Energy, LLC.

The Evaluation Team was composed of Dianne Young, CEO; Rob McGonagle, Senior Energy Consultant, Energy Efficiency Office, City of Toronto; Mark Goss, General Manager of Operations; Danny Chui, Capital Works Manager; Hardat Persaud, CFO; and Gerd Rose, Purchasing Manager. The Evaluation Criteria were as set out in detail in the RFP.

This report seeks Board approval of SunEdison LLC in a joint partnership with SkyPower Corp. (together referred to as "SUN") as the Preferred Proponent and recommends entering into a Letter Agreement between the Board and SUN for the exclusive negotiations of the substantial terms and conditions of a long-form license agreement with SUN for roof top photovoltaic generation development on the grounds. It also directs staff to report back to the Board at its meeting in July 2008 on these results of these exclusive negotiations.

### **Recommendation(s):**

#### **It is recommended that the Board:**

- (1) Approve the entering into of a Letter Agreement with SUN substantially as outlined in Appendix "A" to this report, and including such other commercial terms and conditions as may be required by the Chief Executive Officer and the City Solicitor;**
- (2) Direct staff to report back to the Board at its meeting of July 18, 2008, on the substantial terms and conditions of a proposed long-term license agreement with SUN including an implementation timeline;**
- (3) Request Exhibition Place staff initiate discussions with the City Energy Office about this project and any possible program funding available; and,**
- (4) The confidential information in Attachment 1 not be released publicly in order to protect the competitive position and the future economic interests of the Board.**

### **Financial Impact:**

There are no immediate financial implications to this next step in the RFP process which will be to negotiate the substantial terms and conditions of a Letter of Intent for a long-term license agreement between SUN and the Board for the development, construction and management of a photovoltaic generation plant at Exhibition Place.

### **Decision History:**

In 2004, the Board adopted an Environmental Plan that had as its main objective net energy self-sufficiency by the end of 2010. A 2007 consultant study recommended that in order to achieve this target it would be necessary to undertake substantial energy efficiency projects and at the same time expand the photovoltaic system by 2.3 Megawatts.

### **Issue Background:**

In 2005, the Board contracted with Carmanah Technologies Corporation to design and build as a pilot project a 100kW solar photovoltaic system on the roof of the Horse Palace Building which system was fully commissioned in November 2006. This \$1.1 million project was only made possible because of the funding from the Federation of Canadian Municipalities (\$250,000 grant), Toronto Atmospheric Funds (\$250,000 grant) and the Better Buildings Partnership (\$600,000 interest free loan). In 2007, the Board awarded a contract to Menova Energy Inc. for the design and construction of a combination solar thermal photovoltaic project capable of

generating both 7.7 kW electrical and 7.2 kW thermal energy, simultaneously. Again, funding for this smaller project came in the form of a grant from the Toronto Atmospheric Fund.

While both these installation above have been accepted within the provincial RESOP program which results in the payment of \$0.42 per kilowatt, the cost-benefits of roof-top photovoltaics are still marginal. Certainly, there is not sufficient funding available for the Board or the agencies noted above to fund a one megawatt PV system. Accordingly, staff started to explore the option of forming a long-term relationship with the private sector to construct, maintain and operate a one megawatt PV plant on the roof tops at Exhibition Place. The electricity from this installation would (similar to the wind turbine) be fed into the Board's electrical grid and used solely within the grounds.

Comments:

The RFP for a photovoltaic generation plant was released through the City of Toronto Purchasing Division on March 6, 2008 with a deadline for submissions of April 30, 2008. Proposals were received from Mondial Energy Inc., RESCo Energy Inc., SunEdison Canada and Sundurance Energy, LLC. Attached as the Confidential Attachment 1 to this report is the detailed analysis of each of the proposals and general comments of the evaluation team.

The Evaluation Team was composed of Dianne Young, CEO; Rob McGonagle, Senior Energy Consultant, Energy Efficiency Office, City of Toronto; Mark Goss, General Manager of Operations; Danny Chui, Capital Works Manager; Hardat Persaud, CFO; and Gerd Rose, Purchasing Manager. The Evaluation Criteria as set out in the RFP document was as follows:

Evaluation Criteria	Points Available to be Awarded
<p><b>Experience &amp; Qualifications</b></p> <ul style="list-style-type: none"> <li>• Company history &amp; background</li> <li>• Financial Capacity of the Proponent or the lead/prime firm if its a team proposal</li> <li>• Implemented solar projects</li> <li>• Experience &amp; qualifications of staff</li> </ul>	35
<p><b>Financial Arrangements</b></p> <ul style="list-style-type: none"> <li>• Estimated capital investment, showing detailed costing of all components including separate price for insulated flat panel option for Better Living Centre main roof</li> <li>• Cost per kilowatt installed</li> <li>• Details of financing arrangements for the initial capital investment and sources of equity and debt financing</li> <li>• The value the installed equipment at the end of term of the Contract and information on conditions under which the contract might be continued, extended or amended beyond the contract years</li> <li>• How the equipment and service responsibilities will be affected at the conclusion of the term of the Contract</li> <li>• Mark-up percentages that are applied to cover overhead and profit</li> <li>• Any incentives from various governments, agencies and utility company that</li> </ul>	15

<ul style="list-style-type: none"> <li>the Proponent intends to apply for</li> <li>Outline the effect on the financing model of a capital contribution by the Board of \$50,000, \$100,000 or \$150,000 per section 3.2(k)</li> </ul>	
<p><b>Methodology and Approach</b></p> <ul style="list-style-type: none"> <li>Understanding of the RFP &amp; approach to RFP objectives</li> <li>Technical approach &amp; flexibility to conditions</li> <li>Management &amp; operations plan</li> <li>Detailed Work Plan, along with implementation schedule for the site-specific projects</li> </ul>	10
<p><b>Photovoltaic System &amp; Equipment for Each Specific Site to be Utilized by the Proponent</b></p> <ul style="list-style-type: none"> <li>Power capacity (DC kW) measured at the inverter(s) input</li> <li>Power capacity (AC kW) measured at the inverter(s) output</li> <li>Show nominal and de-rated AC kW production, including data assumption for winter and summer hours of solar generation</li> <li>Estimated capacity factor (%) and annual output (kWh) and provide methodology used to develop the estimates</li> <li>PV array materials</li> <li>Inverters</li> <li>Structural materials</li> <li>Balance of system components</li> <li>Configuration, including flat mounted versus tilt mounted systems</li> <li>Structural requirements including if roof penetration is necessary</li> <li>Operation and maintenance requirements</li> <li>Typical or projected degradation rates for field installations of this type over 20 years</li> <li>Typical useful life of significant components, including PV arrays and inverters</li> <li>Any product or warranty enhancements being offered</li> <li>Description of monitoring system that will be installed at each site including equipment requirements, data output &amp; maintenance requirements</li> <li>Public education component, if any</li> </ul>	40
<b>TOTAL SCORE</b>	100

After reviewing the four proposals in terms of the evaluation criteria, the Evaluation Team is recommending that the Board approve of SUN as the Preferred Proponent for the purposes of negotiating a letter of intent which will include the substantial terms of a long-term licence agreement. Because this license agreement will be for a period of longer than 3 years, it will need the approval of City Council.

The recommended preferred proponent is SunEdison LLC in joint partnership (for this project only) with SkyPower Corp. SunEdison LLC was established in 2003, is North America's largest solar energy service provider, and with over 350 employees operates across a global marketplace. SunEdison Canada, was formed recently in order expand into the Canadian solar energy market and is currently partnered with SkyPower Corporation for purposes of this RFP. SUN has designed and installed more than 700 PV systems totaling in excess of 58 megawatts. To accomplish this SUN has arranged over \$400 million in project financings. SkyPower Corp., a Lehman Brothers Company, was formed in 2003, with demonstrated strength in renewable

energy projects with a primary focus on wind power. SkyPower Corp. has more than 100 renewable energy projects in various stages of development across Canada and has raised over \$900 million to fund these projects.

References for SunEdison include the City of San Diego, Staples and Whole Foods which represent PV systems that range from 1,135 kW to 6,000 kW in size. Other projects currently under construction include a 19 MW PV film project in Ontario and 6.2 MW of solar panels under construction with 10 MWs of projects scheduled to start this year in Spain.

This report recommends that the Board enter into a letter agreement with SUN on the terms and conditions in Appendix "A" to exclusively negotiate the terms and conditions of a detailed Letter of Intent for a long-term license agreement with SUN to develop, construct and manage a photovoltaic generation plant on the grounds.

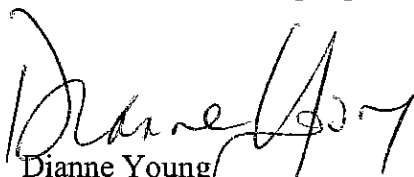
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Dianne Young  
Chief Executive Officer

Appendix "A"  
Terms to be included in Letter Agreement

1. Parties: The Board and SunEdison Canada, in joint partnership with (hereinafter referred to as "SUN")
2. Term: From the date of execution to expire on July 31, 2008, subject to extension at the option of the Board.
3. Concept: SUN will be responsible for the financing, design, construction, operation and maintenance of this PV System and will own the solar photovoltaic electricity generation plant with a combined generating capacity of one (1) megawatt on proposed roof locations under a license agreement with the Board for a term of not less than 20 years.
4. Negotiations:
  - a. On execution of this Letter Agreement, the Parties shall commit to negotiate in good faith to finalize the key terms of a proposed long-term license between SUN and the Board relating to the Concept which agreement shall take the form of a Letter of Intent between the Parties (the "LOI").
  - b. The Parties agree that all negotiations during the Term of this Letter Agreement shall be treated as confidential and that the substance of the negotiations, including the proposed lease terms and conditions, shall not, except as required by law, be disclosed to any third party without the prior written consent of the other party.
  - c. Once negotiated, the LOI shall be presented to the Board and if approved by the Board, shall be recommended to the Executive Committee of the City of Toronto and City Council for consideration and approval.
5. Due Diligence: SUN agree that during the Term of this Letter Agreement, it shall satisfy itself as to the suitability of the Site for the Concept proposed.
6. Costs: Both the Board and SUN agree that each will be responsible for their own costs, fees, disbursements and expenses incurred in the preparation and negotiation of a detailed letter of intent and the long-term lease.
7. Assignment: SUN may not assign, convey or transfer in any way its rights under this Letter Agreement without the prior written consent of the Board, which may be arbitrarily and unreasonably withheld. For greater certainty, an "assignment" shall include a change in the effective control of SUN by any means whatsoever.
8. Termination: Either party may terminate this Letter Agreement at any time by providing seven (7) business days notice in writing.
9. Additional Terms: The Letter Agreement may include such additional commercial terms as may be satisfactory to the Chief Executive Officer and the City Solicitor.