

Consolidated Clause in Administration Committee Report 6, which was considered by City Council on September 25, 26 and 27, 2006.

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**Energy Retrofit Services for Police Headquarters,
St. Lawrence Market and Other Buildings under the
Jurisdiction of the Facilities and Real Estate Division**

City Council on September 25, 26 and 27, 2006, adopted this Clause without amendment.

The Administration Committee recommends that City Council adopt the staff recommendations in the Recommendations Section of the report (August 14, 2006) from the Chief Corporate Officer.

Purpose:

To obtain authorization for the Chief Corporate Officer, the Executive Director of Facilities and Real Estate Division, and the City Solicitor to negotiate and enter into an energy services agreement with Toronto Hydro Energy Services Inc., on a sole-source basis in order to undertake energy efficiency improvements in Police Headquarters, St. Lawrence Market and other buildings under the jurisdiction of the Facilities and Real Estate Division.

Financial Implications and Impact Statement:

Funding in the amount of \$1.2 million is included in the Facilities and Real Estate 2006 Approved Capital Budget (CCA 126-21, CCA 131-01, and CCA 147-25) with cashflow of \$1.2 million in 2006.

This project will result in reduced energy consumption and a simple pay back period of 10 years. Estimated annual net savings of \$125,000, starting in 2007, will be included in the 2007 Operating Budget Submissions of the affected facility users where appropriate, and reported during the 2007 Operating Budget Process.

The Deputy City Manager and Chief Financial Officer has reviewed this report and concurs with the financial impact statement.

Recommendations:

It is recommended that:

- (1) the Chief Corporate Officer and the Executive Director Facilities and Real Estate in consultation with the City Solicitor, be authorized to negotiate and enter into an energy

services agreement with Toronto Hydro Energy Services Inc., on a sole-source basis based on a maximum total cost of \$1.2 million and a simple payback of 10 years with the project commencing in 2006 and being completed in 2007;

- (2) estimated annual savings of \$125,000 be included in the 2007 Operating Budget Submissions, on a prorated basis, of the affected facility users where appropriate, and reported back during the 2007 Operating Budget Process; and
- (3) the appropriate City Officials be authorized and directed to take any necessary action to give effect thereto including the execution of any agreements in a form and substance satisfactory to the Chief Corporate Officer, the Executive Director, Facilities and Real Estate and the City Solicitor.

Background:

In April 2000, City Council adopted Report No. 4, Clause 7, the Environmental Plan (EP), a comprehensive document containing sixty-six (66) recommendations on land, air, water, governance, sustainability, energy, transportation, green economic development and monitoring. The following energy goals/targets are included in the EP:

- (i) a 20 percent reduction in carbon dioxide (CO₂) emissions by 2005 from 1990 levels; and
- (ii) departments to reduce energy use in their operations and in City buildings and facilities by at least 15 percent by 2005.

By adoption of Report No. 6, Clause 3 of the Policy and Finance Committee on April 16, 17 and 18, 2002, Council directed that:

- (1) City Council adopt a mixed-model for implementing energy retrofits of City-owned facilities, to be implemented concurrently as follows:
 - (a) 30 percent to 40 percent of the energy retrofit work is to be sole-sourced through Toronto Hydro Energy Services Inc. (THESI); and
 - (b) 60 percent to 70 percent of the energy retrofit work is to be implemented through a competitive bid process.

Comments:

With reference to Council direction to award, on a sole-source basis, 30 to 40 percent of the City's energy retrofit work to Toronto Hydro Energy Services Inc. (THESI), Facilities and Real Estate Division has been working closely with THESI to identify energy efficiency improvements in many City facilities. THESI had previously completed an energy audit of several Facilities and Real Estate operated buildings including the St. Lawrence Market and has determined that energy consumption reductions are attainable. Similarly, the Police Headquarters building underwent an energy retrofit in the mid nineties but now due to increasing

energy prices and technology advancements could also improve its energy efficiency and reduce its energy use.

Energy Retrofits

The following potential energy efficiency improvements have been identified for these facilities:

- Lighting upgrades;
- Building envelope improvements;
- Heating Ventilation and Air conditioning improvements;
- Building Automation Controls (fine tuning); and
- Power Factor Correction

In addition to the above, the opportunities for using renewable energy will also be assessed. It is recommended that THESI implement all measures on a turnkey basis that includes the detailed feasibility study, engineering, installation, project management commissioning and staff training. There may be some minor service disruptions and work can be completed during unoccupied periods when required. Staff will review the planned energy efficiency measures in order to avoid premature retirement of assets and, furthermore, that they all complement the capital program. Also, any incremental maintenance or operational costs arising from the proposed retrofit changes will be reviewed and assessed to determine significant impacts and ensure they can be accommodated, prior to proceeding with the project.

The total maximum cost for the project is \$1,200,000. It is expected that annual savings for the facilities included in the project will amount to approximately \$125,000 and a simple payback of 10 years. This project will commence in 2006 and will be completed in 2007. It should be noted that the City has in the past completed many water and energy efficiency improvements in its facilities. The water and energy saving measures with the shorter payback periods have already been realized. Taking the next step in energy savings requires larger investments and longer payback periods.

Several benefits will result from moving forward with the proposed energy retrofits including reduced operating costs, increased energy efficiency, facility improvements and reduced CO2 emissions.

Sole-source to THESI

By adoption of Report No. 6, Clause 3 of the Policy and Finance Committee on April 16, 17 and 18, 2002, Council directed that 30 percent to 40 percent of the City's energy retrofit work is to be sole-sourced through Toronto Hydro Energy Services Inc. (THESI). Since 2002 the City has awarded a total of \$30.6 million in energy retrofit work. Of this THESI been sole-sourced \$10.6 million or 34.6 per cent of the work, namely the Civic Centres project and the Community Recreation Centres project. The additional \$1.2 million in energy retrofit work will bring the amount awarded to THESI on a sole-source basis to 37 percent, which is within the Council approved range.

Energy Services Agreement

The City had previously contracted with THESI to complete energy retrofits in its civic centres and other corporate buildings under an energy services agreement. This work is now almost complete. It is recommended that the Chief Corporate Officer, the Executive Director, Facilities and Real Estate and the City Solicitor negotiate and enter into a new energy services agreement with THESI with terms and conditions similar to the current agreement still in place. The energy services agreement will lay out all the terms and conditions for completing the work including fees, insurance, bonding and other terms required to protect the interests of the City. Opportunities to accelerate the work will also be explored in order to realize savings in a timely manner.

The parameters of this agreement would be as follows:

- THESI will be responsible for all design, engineering, construction, project management and monitoring and verification of savings;
- the maximum overall simple payback period for the project is 10 years;
- prior to project implementation THESI will conduct feasibility studies and provide detailed concept reports for each measure for the City's approval. The concept report will outline, in detail, the costs, savings, operating costs and maintenance requirements for each measure. Prior to moving to the engineering and implementation stage, the City must approve a concept report for each site;
- THESI will provide guarantees, insurance and bonding commitments to the satisfaction of the Deputy City Manager and Chief Financial Officer, the Chief Corporate Officer, Executive Director, Facilities and Real Estate and the City Solicitor.

Conclusion:

The project described above will allow the City to move ahead with energy conservation work in its facilities as directed by Council. This report recommends that authority be granted to the Chief Corporate Officer, the Executive Director, Facilities and Real Estate and the City Solicitor to negotiate and enter into an energy services agreement with THESI to undertake energy efficiency improvements as described in this report.

Benefits of this project include: an upgrade of the facilities' physical plant and energy consuming systems, a reduction in CO2 emissions, training of building operators and reduced maintenance costs.

Contact:

Chuck Donohue, P. Eng. Executive Director
Facilities and Real Estate
Tel: 416 397-5151
Tel: 416 392-4828
e-mail: cdonohue@toronto.ca

Jodie Parmar, Director, Business and
Strategic Innovation
Facilities and Real Estate
Tel: 416 338-1295
Fax: 416 392-4828
e-mail: jparmar1@toronto.ca