

## **Electricity Supply Arrangements**

<b>Date:</b>	October 2, 2008
<b>To:</b>	Government Management Committee
<b>From:</b>	Chief Corporate Officer; Acting Director of Purchasing & Materials Management
<b>Wards:</b>	All
<b>Reference Number:</b>	P:\2008\Internal Services\F&re\Gm08084F&re - (AFS 8473)

### **SUMMARY**

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The purpose of this report is to seek an amendment to existing authorities in order to permit improved management of the City's electricity price risk hedging arrangements by enhancing the diversification of the City's electricity price hedging portfolio.

### **RECOMMENDATIONS**

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**The Chief Corporate Officer and the Acting Director of Purchasing & Materials Management recommend that City Council grant authority to:**

1. The Chief Corporate Officer or his designate be authorized to issue electricity pricing quotation requests and award hedging transaction contracts as described in this report in amounts representing financial commitments ranging up to \$50 million for forward terms not exceeding five years and for each year not exceeding the overall value of the City's annual electricity expenditures, from a roster of qualified counterparties, selected in consultation with the Director of Purchasing & Materials Management.
2. Renew the current roster of qualified counterparties for another five years to December 31, 2014 and a roster of eligible counterparties be established every five years thereafter in accordance with City purchasing policies and procedures.
3. The Chief Corporate Officer be authorized to execute new or amending electricity master agreements with counterparties governing the terms and conditions of contracts for differences effecting electricity price hedges that are

- a. satisfactory to the Chief Corporate Officer;
  - b. in compliance with the Statement of Policies and Goals previously adopted by Council; and
  - c. in a form that is satisfactory to the City Solicitor.
4. The Chief Corporate Officer be authorized to execute new or amended agency agreements with the Toronto Community Housing Corporation and the City's participating agencies, boards, commissions and corporations, all as required, on terms and conditions satisfactory to the Chief Corporate Officer and in form satisfactory to the City Solicitor; pursuant to these agreements all administrative costs, including any consulting costs, retailer consolidated billing fees and costs, and account enrolment costs be passed on proportionately to all City electricity end users participating in the program.
5. The Chief Corporate Officer be authorized to negotiate and execute a new amending retailer consolidated billing services agreement with Toronto Hydro Energy Services Inc. ("THESI") or to extend the provision of services for a further five years on a sole-source basis on terms and conditions satisfactory to the Chief Corporate Officer and at a cost that is commercially reasonable in the opinion of the Chief Corporate Officer and otherwise in a form satisfactory to the City Solicitor.
6. Authorize and direct the appropriate City officials to take any action necessary to give effect thereto.

## **Financial Impact**

The total estimated annual cost of electricity, for fiscal 2007, (based on current usage and market pricing) for the City and its Agencies, Boards, Commissions and Corporations, is estimated to be \$180 million (\$127 million for commodity costs and \$53 million for distribution and other charges), including \$87 million for the City alone (\$61 million for commodity and \$26 million for distribution and other charges). Electricity costs are included in the annual operating budgets of City Divisions, Agencies, Boards, Commissions and Corporations.

Allowing for electricity commodity price hedge transactions of up to \$50 million would enhance City staff's ability to better manage the City's overall electricity costs, along with its exposure to market risks. Approving the recommendations will also enable the City to continue paying and allocating electricity bill payments through an electronic, consolidated billing process.

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

## **DECISION HISTORY**

At its meeting of June 27, 2006, City Council approved the City entering into master agreements with up to five (5) electricity counterparties for the purpose of executing electricity price hedge transactions. (Policy and Finance Committee Report No. 1, Clause 12).

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060627/pof5rpt/cl012.pdf>

In the same report, City Council also adopted a Statement of Policies and Goals relating to the use of electricity commodity financial price hedging agreements to address commodity pricing and costs; and approved the City entering into an agreement with Toronto Hydro Energy Services Inc (THESI) as a retailer to provide electronic consolidated retail billing services to the City.

## **ISSUE BACKGROUND**

The City issued Request for Expression of Interest (REOI) 9119-06-7107 in 2006 to establish a roster of electricity commodity price risk counterparties. Master agreements with four successful counterparties were entered into to set out the general terms and conditions that apply to any hedge transactions. The four counterparties are Direct Energy Marketing Limited, Powerex Corp., Integrys Energy Services of Canada (previously known as WPS Energy Services of Canada Corp.), and Shell Energy North America (Canada) Inc. (previously known as Coral Energy Canada Inc.).

The continued existence of the roster was linked to the termination of all hedge transactions with counterparties with terms that will end on December 31, 2009. This arrangement limits the City's ability to manage the long term price risks given the tight electricity supply and increasing demand growth in Ontario. The amendments to the existing Council authorities proposed in this report would permit improved management of the City's electricity commodity financial price hedge arrangements by authorizing 5 year forward price hedging transactions with counterparties from a roster, selected in consultation with the Director of Purchasing & Materials Management.

## **COMMENTS**

### **Electricity Hedge Arrangements**

The City, through the Energy & Waste Management Office of the Facilities & Real Estate Division, makes arrangements to hedge the commodity price of a portion of the electricity consumption for City Divisions, various Agencies, Boards, Commissions and Corporations (ABCs), and the Toronto Community Housing Corporation (TCHC). The arrangement is a financial price hedging agreement in the form of 'contract for differences' (CFD) to manage electricity price risk which may be affected by supply adequacy, energy markets, demand and severe weather. The estimated cost or savings

associated with using a CFD will be a function of the amount hedged, the pricing quoted by one or more counterparties and the Hourly Ontario Electricity Price (HOEP) during the term of the transaction. The HOEP is determined by the Independent Electricity System Operator.

Apart from the CFD, the supply of electricity itself is delivered through the local distribution company (Toronto Hydro Electric System Limited). The City's total electricity costs amounted to approximately \$180 million in 2007. The delivery charge and other service charges are regulated and totalled approximately \$53 million. The remaining \$127 million represents the commodity cost which is not regulated and is subject to the risk of market price fluctuations. Managing the risk of this commodity cost is the subject of this report.

In addition to the commodity price arrangement, the City entered into an agreement with THESI to provide retailer consolidated billing services. This service allows the City to receive and process consolidated bills electronically instead of manually processing monthly paper bills for about 4,000 accounts. Recommendations included in this report would allow the Chief Corporate Officer to execute the underlying retailer arrangements and services and agency agreements with City participants in the program.

Furthermore, this report recommends that administrative costs, outside supportive consulting services, and retailer consolidated billing fees and costs be included as part of the costs to be passed on to the electricity end user group in proportion to their annual electricity consumption. This would be consistent with current arrangements.

### **Inherent or Default Hedge**

Default price-risk coverage is currently available through two Provincial mechanisms: the "Ontario Power Generation Rebate" (OPG Rebate) and the "Global Adjustment". The OPG Rebate is a mandated price cap on the average unit revenue on power generated by certain facilities owned by OPG, and it covers approximately 20% of the energy in the electricity marketplace. The Global Adjustment is essentially a price regulation applied to another 45% of the energy in the electricity market, representing power from OPG's base-load facilities and some non-utility generation contracts.

These two mechanisms provide the City with a default hedge that applies to approximately 65% of its consumption. Therefore, the residual price risk relates to approximately 35% of the City's consumption.

### **Current Electricity Hedge Strategy**

The City is a large electricity user with a total annual electricity consumption of approximately 2 billion kilowatt-hours (kWh). The electricity consumption may be broken-down as follows: TCHC (21 percent); TTC (22 percent), Toronto Water Division (28 percent); other City Divisions (21 percent), and other ABCs (8 percent).

The optimum amount of electricity to be hedged by the City through a CFD arrangement will be determined for each major user group, taking into account electricity usage, risk management objectives, and the degree to which default price-risk coverage is available through Provincial price rebate mechanisms, and regulated pricing might offset the City's risk. As the default price-risk coverage mechanisms act as price-hedges, the City would only be required to manage its residual risk. It is important to note that hedging a greater amount than is required could result in an over-hedged condition, whereby the net price is actually increased rather than reduced.

After having determined the optimal mix of short and medium term purchasing positions, the City will call upon its counterparty pool to provide price quotations, subsequently selecting the most favourable pricing, and entering into related transactional contracts. The City will benefit through the continued competition between counterparties, thereby promoting optimal supply pricing and permitting an appropriate level of risk management. This arrangement is similar to the City's natural gas supply purchase strategy.

The City's current strategy is intended to also allow for efficient management of the City's electricity price risk hedging portfolio by enabling a diversification of terms-to-maturity (e.g. 1-5 years) of transactional contracts within the portfolio. Structuring an optimal mix of short and medium term transactions is a fluid exercise and an important tool for mitigating the City's exposure to market price volatility. Market conditions are continually monitored by City staff (in conjunction with the City's advisor) to adjust the portfolio accordingly.

### **Amendment to Portfolio Strategy**

It is important to have the ability to enter into commitments of up to five years, on an ongoing basis. Similar to the City's natural gas purchase strategy, the five year commitments would allow the City to have the flexibility to manage year-to-year price changes and to build a 'laddering' portfolio to minimize the market risk. However, previous Council authorizations have allowed for commitments of up to three years, with all transactions in the portfolio ending on the same specified date which is December 31, 2009.

Furthermore, as the expiry of arrangements with each counterparty in the City's roster has become linked with the expiry of transactional contracts, the availability of diversified transactional contract terms becomes increasingly restricted over time. The end result is that City staff's ability to properly manage electricity cost and price risk becomes increasingly diminished over time.

In order to enhance the City's ability to manage its market risk exposure, this report recommends that the City amend its electricity hedge strategy, in order to de-link the City's ability to enter into transactional contracts from the ongoing selection of electricity hedge counterparties that may participate in the City's roster. The amended strategy

would permit staff to seek and accept electricity hedge bids from those in its roster, for forward terms up to five years for commitments of up to \$50 million.

It is critical to note that due to the volatility of the electricity market, the industry practice is that price quotations are generally not held open for longer than approximately fifteen (15) minutes. Therefore, it is important to continue to have the flexibility to act in a timely manner. For this reason, this report also recommends that the Chief Corporate Officer or his designate be authorized to issue and accept price quotations with respect to load sizes that represent financial commitments of up to \$50 million.

### **Selection of a Roster of Electricity Counterparties**

In accordance with the City's purchasing by-law and purchasing policies and procedures, a REOI was issued in 2006 by the Purchasing and Materials Management Division to potential counterparties. Through the evaluation team, and a detailed negotiation process with the assistance of an outside legal firm, four counterparties entered into master agreements with the City to form a roster of electricity counterparties.

The 3 year term for the roster and hedge transactions currently expire on December 31, 2009. This arrangement limits the City's ability to manage the long term price risks as discussed in the report. In order for the City to have continual transactions with these counterparties, this report recommends that the roster be renewed for another five (5) years. The roster of eligible counterparties will be established every five (5) years thereafter as required in accordance with the City's purchasing policies and procedures.

This report was prepared in consultation with the City Solicitor, and the Deputy City Manager & Chief Financial Officer.

### **CONTACT**

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### **SIGNATURE**

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