3
ELECTRICITY PROCUREMENT STRATEGY

(Regional Council at its meeting on April 19, 2007, referred the foregoing Clause to the Commissioner of Corporate Services for a report to the May 3, 2007 meeting of the Finance and Administration Committee.)

The Finance and Administration Committee recommends the adoption of the recommendations contained in the following report, March 12, 2007, from the Commissioner of Corporate Services:

1. RECOMMENDATIONS

It is recommended that:

1. York Region adopt an interim Electricity Procurement Strategy that includes a combination of the Regulated Price Plan, the Wholesale/Spot Market, and a Fixed Price Contract.

2. Regional Council authorize the Association of Municipalities of Ontario (AMO)/ Local Authority Services (LAS) as part of their electricity services program with the authority to negotiate fixed price electricity contracts including final price on behalf of York Region. In addition, Regional staff be authorized to sign a contractual agreement with AMO/LAS subject to prior approval of the Regional Solicitor.

3. York Region adopt and implement the purchasing of Green Power for two facilities within the property portfolio.

4. Regional Council authorize the Commissioner of Corporate Services to sign a contractual agreement with a Green Power Electricity Supplier subject to prior approval of the Regional Solicitor.

5. Staff report back to Regional Council in the Spring of 2008 with a further refinement to the Procurement Strategy.

2. PURPOSE

The purpose of this report is to seek Regional Council's approval to adopt the recommended Electricity Procurement Strategy, as outlined in this report.
The Province of Ontario has indicated that Municipalities, Universities, Schools, and Hospitals, referred to as the MUSH sector will no longer be able to purchase electricity

under the Regulated Price Plan (RPP) after April 1, 2008. By adopting the proposed Electricity Procurement Strategy the Region will mitigate financial risk through cost reduction while demonstrating environmental stewardship.

3. BACKGROUND

On a corporate scale, York Region spent approximately $10M purchasing electricity in 2006, which was supplied by three Local Distribution Companies (LDCs). The Region's energy use continues to grow in conjunction with the increased demand for Regional services.

As part of the MUSH sector, the Region is eligible to purchase the commodity portion of its electricity under the Regulated Price Plan (RPP). The RPP arrangement will be discontinued effective April 2008 and will be replaced by the smart meter RPP (time of use meters supplied by LDC's). At that time, York Region accounts will be billed for electricity based on the time of day that the electricity is consumed. Alternative purchasing options to the RPP today include the wholesale/spot market where hourly electricity prices are set by the Ontario Energy Board (OEB). Any electricity account that is not interval metered must be enrolled with a retailer in order to purchase electricity from Ontario's wholesale/spot market. Upon exiting the RPP, each account is assessed an RPP exit fee which is the accounts portion of the difference between the revenue collected by the OEB and the cost of providing electricity to RPP consumers in Ontario. Another purchasing alternative to the RPP is through a mechanism called a fixed price contract with specified duration terms offered by qualified retailers in Ontario.

Fixed price contracts are contractual agreements for the supply of electricity where the price of the commodity is fixed for the duration of the contract. This type of contract provides the benefit of knowing and locking in your energy costs for a set period of time typically one to three years. The list of qualified retailers in Ontario includes; Direct Energy, Constellation New Energy, Coral Energy, and the AMO/LAS Electricity Services Program (see Attachment 2).

The Association of Municipalities of Ontario (AMO) and its subsidiary company Local Authority Services (LAS) have developed an Electricity Services Program to assist municipalities to both prepare for the post-RPP era and practice cost reduction on electricity purchases by leveraging the economies of scale of the membership group. The objectives of this bulk electricity services program are synonymous with municipal objectives: competitive pricing, maximizing purchasing power and significantly decreasing the time and cost to enter into retailer agreements. Please refer to attachment *2* for detailed program information.

Green Power procurement is an integral part of the overall Electricity Procurement Strategy that will allow York Region to demonstrate environmental stewardship in the context of the sustainability framework. Green Power encompasses a range of environmentally friendly alternatives to traditional sources of electricity generation in Canada. Green Power must be purchased from an EcoLogo® certified source. Environment Canada's Environmental Choice Program gives EcoLogo® certification to Alternative Source Energy Generation from natural sources, such as wind and sun, as well as low-impact technologies, including small-scale hydro, certain biomass and biogas technologies, and geothermal energy.

4. ANALYSIS AND OPTIONS

Regional staff realizes the importance of being proactive in identifying alternative electricity procurement methods in an effort to mitigate financial risks in the purchasing of electricity for the corporation.

To assist staff in evaluating various electricity purchasing strategies, an independent energy consultant Aegent Energy Advisors Inc. was hired to conduct a detailed analysis of the procurement methods listed below and recommend a suitable Electricity Procurement Strategy for the Region. The options and major findings are listed below.

4.1 Option 1 - Maintain Status Quo

A typical household in York Region consumes less than 750 kWh per month and pays 5.5 cents per kWh (tier-one) of the RPP. By comparison the York Region Administrative Centre consumes an average of 538,000 kWh per month and effectively pays a commodity price of 6.4 cents per kWh (tier-two) of the RPP for all the electricity that is consumed. This procurement option is not recommended for York Region because of the inherent cross subsidy that exists under the RPP today. When a large MUSH sector consumer purchases electricity under the RPP they quickly 'blow through" the lower - priced first tier block. As a result of this, the average price quickly approaches the tier-two price of 6.4 cents per kWh and in the process creates a subsidy that benefits low volume residential consumers. This option requires the least amount of effort from Regional staff to adopt as this is the current method of purchasing electricity however, it is anticipated that this purchasing avenue is only accessible to the MUSH sector until April 2008.

4.2 Option 2 - Purchase Electricity on the Wholesale/Spot Market

This option will require all York Region electricity accounts to opt out of the RPP and be put on the wholesale/spot market. This option is riskier due to the price volatility inherent in the electricity market. All electricity accounts that do not have an interval meter are required to be signed up with a retailer in order to access the wholesale/spot electricity market. This option is not recommended for the following reasons:

- Additional legal costs and significant time delays required to identify and finalize enabling agreements with electricity retailer(s).

- Only non interval metered accounts that consume more than 2,500 kWh per month are recommended to opt off the RPP. This threshold will allow the recovery of any RPP exit fees and retailer sign up costs.
- Substantial additional resources required for the collection and analysis of contractual information, electricity market forecast information and program cost savings.

4.3 Option 3 - Blend of RPP, Spot Market and Fixed Price Electricity Contracts (AMO/LAS)

This third purchasing option requires York Region to purchase energy through a blend of the RPP, wholesale/spot market purchases, and via a fixed price contract(s). This option offers both a high level of price certainty and the opportunity to expose loads that would benefit (e.g. night use only) to the spot market. As well, this option offers York Region the greatest opportunity to further develop and refine a purchasing strategy that takes advantage of available provincial rebates while at the same time, offering a high level of price certainty achieved through the use of fixed price contracts and the continued use of the RPP.

It is recommended that fourteen (14) interval metered accounts be removed from the RPP and put on the wholesale/spot market. In order for an interval metered site to opt out of the RPP, a notification letter requesting this change from York Region is required by LDC's. All street lighting accounts and any non-interval metered accounts where the monthly consumption is above 2,500kWh should exit the RPP and be enrolled with a retailer to access the wholesale/spot market or entered into a fixed price contract. Regional staff estimate an annual cost reduction of up to $667,000 (net of any RPP exit fees). Recognizing the extensive cost and the significant time it would take to finalize contractual agreements with pre-qualified retailers, it is recommended that any electricity account that requires enrolment with a retailer be enrolled in the AMO/LAS Electricity Services Program. Upon recommendation by Aegent, initially when entering into a fixed price contract York Region will apportion approximately 35% of the available load into a short term contract with an expected duration of one year. The remaining 65% of the load will be purchased via the wholesale/spot market at the Hourly Ontario Energy Price (HOEP). As York Region gains familiarity with this mechanism and continues to refine its optimum load percentage, alternative load quantities will be considered and evaluated in subsequent buys.

In order to implement this option and successfully manage this new procurement strategy the following additional administrative costs will be needed:

- Additional Temporary Full-Time resource to assist in the collection and analysis of contractual information, electricity market forecast information and program cost savings for 2007. Additional permanent resource requirements will be reported in 2008 budget.

- Modifications to York Region's Energy and Environmental Management System (EEMS) to monitor and track new billing and usage information.

4.4 Option 4 - Partner with CO-OP and / or Energy Broker

Under this option, York Region staff have investigated the possibility of partnering with other municipalities (Regions of Halton and Waterloo) and/or an Energy Broker to procure electricity via a bulk purchase using fixed price contracts. The preliminary investigation shows that significant legal and administrative costs would be incurred in order to finalize contractual agreements with pre-qualified electricity supply retailers adding further time delays to the procurement process. The results of the detail investigation will be presented in the spring 2008 report along with further refinement of the procurement strategy.

4.5 Option 5 - Purchase Green Energy

Under this option, York Region would enter into a one-year contract with an EcoLogo® certified retailer to purchase green energy to power a facility or a portion of one at an annual premium of 3.0 cents per kWh. The benefit of purchasing green energy allows the Region to demonstrate environmental stewardship while helping to reduce air pollution attributed from coal fired electricity generation plants in Ontario. The additional green power premium will displace conventional generators further reducing emissions of smog and climate changing causing pollutants.

Table 1 below identifies various options and associated premium of procuring green energy for municipal use.

It is recommended by Regional staff, that Council adopt Green Option B & F (Table 1 below) at an annual premium of $73,112 per year. The two facilities (Administrative Centre and the Household Hazardous Recycling Depot) were chosen because of the anticipated goodwill associated with the "Greening" of two prominent Regional facilities as well as the fact that these two facilities offer an optimum balance between the green power premium and the achievable emission reductions. The expected annual eCO_2 (equivalent carbon dioxide) reduction related to the use of green power is 1,715 tonnes.

Table 1
Green Power Premium

Option	Facility to "Green"	Annual Green Power Premium (2006 consumption)	eCO_2 reductions (Tonnes)
A	Administrative Center - gross area	$193,686	4,545
B	Administrative Center - net usable area	$70,537	1,655
C	CAO/Chairs Office	$1,807	42
D	Council Chambers	$2,340	54
E	CAO/Chairs Office/Council Chambers	$4,148	97
F	Household Hazardous Recycling Depot	$2,575	60
Total for Option B&F		$73,112	1,715

* Please refer to *attachment 1* for detailed costing.

4.6 Relationship to Vision 2026

The Electricity Procurement Strategy as outlined in this report supports a number of principles and goals of Vision 2026 and would clearly support the Corporation's values of cost efficiency to taxpayers, excellence in customer service, and proactive planning for the future. By adopting the recommendations in this report, York Region can manage its electricity costs in a proactive manner while demonstrating environmental stewardship and leadership in using green power for a portion of its energy needs.

5. FINANCIAL IMPLICATIONS

York Region staff recommends to Council the adoption of a combination of Options 3 and 5 as outlined in sections 4.3 and 4.5 of this report.

Under Option 2, a total financial impact of putting all the Region's electricity accounts onto the wholesale/spot market could not be determined due to the volatility experienced in that market. However, it can be reasonably determined that this is not a financially viable solution because only those non interval metered accounts that consume more than 2,500 kWh per month are recommended to opt off the RPP. As such, not all accounts are perfect candidates for opting off the RPP at this time.

Under Option 3, York Region will remove a portion of its electricity accounts out of the RPP and purchase it through a blend of spot market purchases and a fixed price contract(s). York Region staff estimate annual cost reduction in year one up to $254,500 and year two up to $509,000 (net of any RPP exit fees). RPP exit fees of $184,000 is a one-time non budgeted charge to be offset by the annual cost reduction realized in year one and subsequent years too. Please refer to attachment 3 for further costing detail.

Under Option 5, the Region by purchasing Green Energy can demonstrate environmental stewardship by helping to reduce air pollution caused by coal fired electricity generation in Ontario. It is recommended by Regional staff, that Council adopt Options B & F as outlined in Table 1 of this report. By going "Green", York Region can reduce annual carbon dioxide emissions by 1,715 tonnes through an annual green power premium (in addition to the regular electricity cost) of $73,112. For a more detailed costing analysis (refer to attachment 1).

The total estimated annual cost reduction (see attachment 3) related to the proposed Electricity Procurement Strategy is estimated up to $509,000 per year.

6. LOCAL MUNICIPAL IMPACT

There are no local municipal implications associated with this report.

7. CONCLUSION

The proposed Electricity Procurement Strategy provides a comprehensive approach to the changing electricity market with an annual estimated cost reduction of up to $509,000. The adoption of these recommendations will demonstrate the Region's proactive approach in mitigating financial risk associated with the procurement of electricity while demonstrating environmental stewardship by investing in Green Power.

For more information on this report contact Subhash Bhatia, Program Manager, Corporate Energy Services, extension 1872 of the Corporate Services Department - Property Services Branch.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause were included in the agenda for the April 5, 2007 Committee meeting.)