

City of Mississauga  
**Corporate Report**



<p>Date: January 25, 2024</p> <p>To: Chair and Members of General Committee</p>	<p>Originator's files:</p>
<p>From: Raj Sheth, P.Eng, Commissioner of Corporate Services</p>	<p>Meeting date: February 21, 2024</p>

## Subject

**Annual Report on Commodity Price Hedging Agreements for 2023 (Electricity and Natural Gas)**

## Recommendation

That the Corporate Report dated January 25, 2024 entitled "Annual Report on Commodity Price Hedging Agreements for 2023 (Electricity and Natural Gas)", from the Commissioner, Corporate Services be received for information.

## Report Highlights

- The Ontario Regulation 653/05 "Debt-related financial instruments and financial agreements" under Municipal Act 2001 as it pertains to Commodity Price Hedging Agreements, requires that municipalities adopt a statement of policies and goals relating to the use of financial agreements to address commodity pricing and costs before the municipality enters into commodity price hedging agreements. City of Mississauga adopted Corporate Policy #03-06-07 Procurement of Electricity and Natural Gas. This report is to satisfy the requirements of this Policy.
- The goal of the electricity and natural gas procurement strategies is to mitigate the risk of price volatility and optimize the cost of the City's electricity and natural gas.
- Fixed Price Contract (Hedging) is a method of managing the electricity and natural gas price volatility.
- The total cost of electricity for the City of Mississauga in 2023 was \$13,058,488 (1.76% tax included). The market conditions and offerings did not favour hedging for electricity; therefore, this strategy was not considered in 2023.
- The total cost of natural gas for the City of Mississauga in 2023 was \$3,585,702 (1.76% tax included). The City entered into a hedging agreement for 219,450 GJ (67%) of the total natural gas requirements of 330,504 GJ for 2023 which was based on internal evaluation and SME's advice as natural gas prices were forecasted to increase.

## Background

This Report is being provided to General Committee as required by Corporate Policy # 03-06-07 on Commodity Price Hedging Agreements on Electricity and Natural Gas. The Policy states that electricity and natural gas procurement will be undertaken in a manner that endeavours to balance the need to achieve the lowest cost with the need for price stability.

To assist in developing the City's electricity and natural gas procurement strategy, the City hired Jupiter Energy Advisors Inc. (Subject Matter Expert) as an energy consultant for natural gas procurement and WattsWorth Analysis Inc. as an energy consultant for electricity procurement. They are hired to advise on supplier contracts and market opportunities and to provide the City with ongoing market updates and support as required.

The Policy also requires that the Commissioner of Corporate Services provides a report to Council, on an annual basis that contains the information provided in this report.

## Comments

### Electricity

There are 3 major costs associated with Electricity use for the City:

- Commodity/Supply – The cost of purchasing the electricity from a Generator, Retailer, or the Local Distributing Company (LDC).
- Global Adjustment – Charge which includes compensation to Ontario Power Generation when market prices fall below an agreed base price but also the recovery of premium that the Province pays towards green power generation projects and conservation programs. Global Adjustment can be either Class A, Class B or embedded in the commodity rates for small accounts.
- Regulated Charges – Costs to deliver the electricity from the Generator to the LDC (Transmission) and from the LDC to the end user (Distribution) in addition to fixed connection and administrative fees.

### **2023 Strategy**

Hedging is a procurement strategy known to manage the price volatility. Hedging was not considered for the City's electricity purchase since 2004 when Global Adjustment was introduced. The reason for this is that retailers are currently only offering contracts to cover the Hourly Ontario Electricity Price (HOEP) which is the commodity portion of the electricity price, and not the Global Adjustment. As the HOEP currently makes up 30% of the pricing, a hedge would still leave a portion of the City's electricity exposed to the volatility of the Global Adjustment.

### **2024 Strategy**

With HOEP (i.e. index rates) currently averaging about 2.95 cents per kWh year-to-date, the Global Adjustment (7.22 c/kWh) still makes up a higher share of the City's electricity charge

(10.19 c/kWh). As such, no hedging is currently suggested as part of the procurement strategy for 2024.

### **Natural Gas**

There are three major costs associated with Natural Gas use for the City:

- Commodity/Supply – The cost of purchasing the physical natural gas from a supplier.
- Transportation – The costs associated with moving the purchased natural gas from the point of purchase to the Local Distributing Company (LDC) in Ontario. If natural gas is purchased directly from the natural gas suppliers the transportation cost becomes embedded in the commodity price.
- Distribution Costs (Regulated Charges) – Administrative charges and costs to deliver the natural gas from the LDC to the end user and the Federal Carbon Charge.

This report refers to the first two bullet points. Regulated charges are set by the Ontario Energy Board (OEB) or the Federal government and are not subject to commodity purchase strategies.

### **2023 Strategy**

In the past, the City used a mix of fixed and spot market pricing to protect the budget against price volatility. For 2023, the City purchased 67% of the required quantity on fixed price contracts (hedging). The decision was taken after reviewing historical market conditions and the future forecasted trends of the factors that impact natural gas prices. The City also reviewed hedging scenarios received from Subject Matter Experts (SME) and a summary of the purchase strategy used in 2023 is presented in Table 1.

*Table 1: Natural Gas 2023 Procurement Strategy*

<b>Year</b>	<b>Procurement Method</b>	<b>Period</b>	<b>Duration</b>	<b>Amount (% of total volume)</b>	<b>Volume of Natural Gas</b>
<b>2023</b>	Hedging (contract)	Jan-Jun	6 Months	67%	109,050 GJ
		Jul-Dec	6 Months	66%	110,400 GJ
	Daily Priced Index	Jan-Jun	6 Months	33%	54,750 GJ
		Jul-Dec	6 Months	34%	56,304 GJ
<b>2023 Totals</b>		<b>Jan- Dec</b>	<b>12 Months</b>	<b>100%</b>	<b>330,504 GJ</b>

It should be noted that the decision to engage in different purchase strategies of natural gas is always based on the information available at the time and the recommendations provided by the SME engaged by the City to advise on commodity procurement. Section 1 of Appendix 1 – Supporting Information compares the actual market (index) spot price against the SME's closing price forecast and upside at 90% confidence based on the market conditions prevalent in 2022. Throughout 2022 the actual spot market (index) prices were quite volatile due several factors (detailed in next section) impacting the market conditions, and trended closer to the upside 90% forecast price. The forecast from the SME suggested that the spot price would be a minimum of

\$6.36/GJ (SME closing forecast) and a maximum of \$12.27/GJ (Upside 90% Confidence) going into 2023. Therefore, due to the market (index) price volatility throughout 2022 and similarly higher market (index) price forecasts going into 2023, the City decided to hedge once again at the end of 2022, to provide some stability for the 2023 budget. Refer to Section 2 of Appendix 1 – Supporting Information for additional details.

### **2024 Strategy**

Based on 2024 forecasted conditions (Refer to Section 3 of Appendix 1 – Supporting Information) and SME recommendation that natural gas markets stabilized following the volatile conditions of 2022, no additional hedging was procured for 2024. This decision will be revisited in collaboration with our SME as market conditions change and feasible hedging options become available.

## **Financial Impact**

In 2023, the City achieved the intended utility budget stability with hedging.

## **Conclusion**

This report provides an overview of the electricity and natural gas procurement strategy used in 2023 and the results of the strategy. Additionally, it presents the approach to be followed in 2024.

The City proactively monitors electricity and natural gas markets conditions and takes appropriate procurement decisions in order to mitigate the risk of price volatility and optimize the cost of the City's utilities.

## **Attachments**

Appendix 1 - Supporting Information



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