REPORT TO: Finance and Corporate Services Committee

DATE OF MEETING: June 5, 2023

SUBMITTED BY: Greg St. Louis, Director, Gas & Water Utilities, 519-741-2600 ext. 4538

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WARD(S) INVOLVED: All Ward(s)

DATE OF REPORT: May 22, 2023

REPORT NO.: INS-2023-247

SUBJECT: Natural Gas Purchase Policy Review - 2023

RECOMMENDATION:

That the proposed updates to Policy No. FIN-ACQ-560 as proposed by report No. INS-2023-247 and provided in Appendix A be approved.

REPORT HIGHLIGHTS:

- The purpose of this report is to review the performance of the natural gas purchase portfolio in meeting its strategic objectives and to provide recommendations for improvements.
- The key finding of this report is that the current purchase horizon of 3 years is sufficient to maintain a balance between rate stability and market responsiveness.
- The report also recommends changes to supplier financial health criteria to qualify more suppliers for short term deals.
- There are no immediate financial implications for this report however the proposed modifications to the Gas Purchase Policy are intended to provide gas supply purchases that are market responsive and provide rate stability to Kitchener Utilities customers.
- This report supports the delivery of core services.

BACKGROUND:

In January 1998, Council adopted policy I-560 (*The Gas Purchase Policy*), which outlines the procurement of natural gas supply, separate from the City's purchasing bylaw. The main driver for this separate policy is that the nature, extent, and timing of these transactions did not align with the City's existing approvals process for goods and services.

Since its inception, this policy has been amended four times, with the most recent amendment being in June 2014 when council established a more *"market responsive"* management of the gas purchase portfolio. This was accomplished by reducing the proportion of fixed purchases and the purchase horizon from 5 years to 3 years. Fixed proportions determine the minimum and maximum limits of forward fixed price contracts (hedging) out of the total annual requirements. These limits ensure the use of disciplined approach to acquire blended portfolio of natural gas that balance between rate stability and market responsiveness. Tables 1 and 2 below provide the fixed portfolio limits before and after the changes.

Table 1: Pre 2014 Fixed Portfolio Limits

Past Fixed Limits	Year 1	Year 2	Year 3	Year 4	Year 5
Maximum	90%	70%	50%	30%	20%
Minimum	40%	30%	20%	10%	10%

Table 2: Post 2014 To Date Fixed Portfolio Limits

Current Fixed Limits	Year 1	Year 2	Year 3
Maximum	60%	40%	20%
Minimum	20%	20%	0%

As per clause 4 of the gas purchasing policy, Staff is required to review the policy on a no less than three-year basis to ensure that the ongoing performance of the portfolio is meeting its strategic objectives and customer's rate expectations. This report addresses the requirement as per clause 4.

REPORT:

Since the introduction of the *market responsive* policy in 2014, Staff has found that retail rates charged to Kitchener Utilities customers continue to be more reflective of market costs as will as being reasonably stable.

Figure 1 below depicts Kitchener Utilities' retail gas rate charged to its customers compared to market prices and Enbridge Gas rates. Table 3 summarizes Kitchener's gas rate impact in relation to the market trend.

- **Section 1** – The previous report (INS-17-085) in 2017 described how well the 5-year horizon and Maximum/Minimum fixed percentages performed in extreme volatility (upward and downward) during the 16-year period including 2014. Volatility during that period was attributed to strong natural gas demand with supply unable to keep up, driving high prices. High prices led to significant re-investment in North America in both LNG import terminals as well as unconventional gas retrieval from shale formations. The success of the latter led to the substantial price drop occurring in 2008/09 coincidentally during the financial crisis. Kitchener Utilities' legacy fixed prices reaching out 5 years showed poor responsiveness which led to the recommendation and approval to reduce the purchase horizon to 3 years.

- **Section 2** – The period of June 2014 to October 2017 was too short a period to evaluate the new parameters, however during that period it appeared to show the rates to be more market responsive as the gas market fell again and KU rates subsequently followed.

Section 3 – This gas market in the most recent period from November 2017 to April 2023 presented mid-range volatility. The changing market conditions and a global pandemic brought in demand uncertainty and resulted in a recent spike in prices. The policy provided the parameters that enabled. KU to set rates that were relatively stable, more competitive compared to Enbridge rates and able to buffer market prices spikes for longer periods of time.

- **Section 4** – This section provides a forecast for future market prices based on Kitchener Utilities' consultant advice. They consider future supply and demand factors, projects and market trends and provide periodical market updates and forecasts. The latest forecast shows an upward trending market prices with mid-range volatility for the coming 3 -5 years. The current purchase policy parameters are expected to perform well in these conditions.

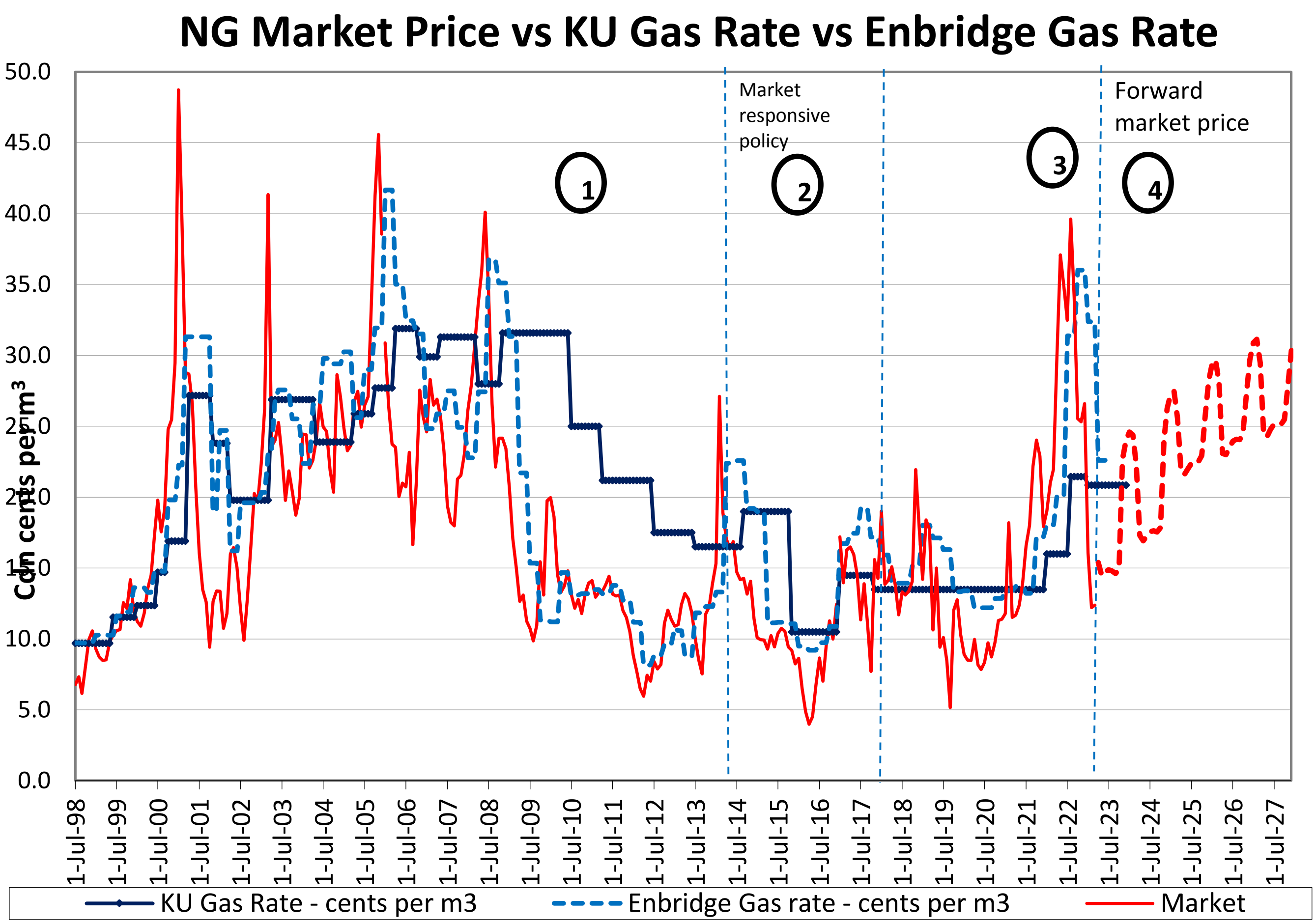

Figure 1: Natural Gas Market Price vs. KU Gas Rate vs. Enbridge Gas Rate

Table 3: Market trends vs. KU Rate Impact Summary

Section	Market Trend	KU Rate Impact
1	High Volatility	Good performance during rising market prices; poor responsiveness in dramatic fall-off of prices.
2	Low Volatility	New 3-year rate impact seems more responsive and stable.
3	Mid-range Volatility	Multi-year stable pricing was enabled by the policy. The increased volatility has a mild impact on rate responsiveness.
4	Mid-range Volatility	Forward market forecasts are projected to be upward trending with mid-range volatility. Purchase policy is expected to soften the impact of these conditions.

The current gas purchase policy with the 3-year purchase horizon provides a balanced approach between rate stability and market responsiveness. It allows Kitchener Utilities to soften price hikes in volatile market conditions, maintain price stability in upward/increasing market conditions and respond to market prices in downward/decreasing markets. Staff recommends that the purchase policy horizon of 3 years and the fixed portfolio limits in table 2 remain unchanged until the next natural gas purchase policy review in 2026.

It is important to note that hedging is not about beating the market and winning but its primary goal is to reduce volatility in prices and keep rates stable for customers. Also, supply rates are charged at cost and the utility makes no money from these programs. During some periods, Kitchener's gas rates will be higher than short term market prices and at other times, it will be lower. This is the trade-off required for stable rates, which are favored by most Kitchener Utilities customers.

Modification of financial health minimum required by natural gas suppliers

Market volatility often is the result of tightly matched supply and demand and more specifically is riskier when the market sentiment is that demand is outpacing supply growth. This is the current and foreseeable market situation globally and to a lesser extent in North America. A control exists in the policy to protect the portfolio from suppliers that are not strong financially to deliver contracted supply throughout the full term of the transaction regardless of current market pricing at any point in time. For example, in February 2021, "winter storm Uri" resulted in widespread sustained extreme low temperatures in Oklahoma and Texas triggering high demand for gas and simultaneously choked off supply due to wellhead freeze-offs. This also triggered extreme volatility in day pricing in excess of $100/MMBtu for several consecutive days due to firm contracted supply failures which lead to high cost of supply replacement and/or penalties levied by utilities and pipelines. Suppliers that cannot sustain this kind of extreme cost risk typically are not financially strong.

This financial strength leads to inherent cost premiums to support the security. Also, multiple suppliers help to make a deeper, liquid market and better price discovery. Both principles exist in the current purchasing policy. What is found typically in a pool of suppliers is that those with high credit rating (financial strength) often carry price offers that are on the high side of the data pool. Conversely, those with less financial strength have less overhead cost to recover so have the opportunity to make lower offers (with all other price drivers being equal). This is an example of the classic risk-reward trade off. The fixed price risk of a longer term is higher with a less credit-worthy counterparty.

An adjustment to the policy is recommended as a result of these findings to enable suppliers with one category below “investment grade” credit rating category to participate in purchase opportunities that reach no further than the end of Year 1 of the policy’s three-year timeframe. Currently suppliers up to and including line 10 in Table 4 are qualified to participate in natural gas purchases and the change will allow the ones in line 11 to bid on year 1 deals. This will qualify more suppliers to bid on short term deals which will provide better prices for the City while maintaining the risk mitigation measures for long term deals. The proposed changes to clause 6 of the gas purchase policy are provided in Attachment A.

Also, upon closer review of the Gas Purchase Policy a small change is recommended to clarify the intent. Specifically, it is proposed that clause 8 first sentence be updated:

> *Current: The financial exposure of the City will be minimized by seeking financial assurances in the event of supplier default.*
> *Proposed: The financial exposure of the City will be minimized by seeking financial assurances in **circumstances of a high risk** of supplier default*

Table 4: International Credit Rating Agencies Scores

No	S&P	Moody's	Fitch	Meaning and Color
1	AAA	Aaa	AAA	Prime
2	AA+	Aa1	AA+	High Grade
3	AA	Aa2	AA	
4	AA-	Aa3	AA	
5	A+	A1	A+	Upper Medium Grade
6	A	A2	A	
7	A-	A3	A-	
8	BBB+	Baa1	BBB+	Lower Medium Grade
9	BBB	Baa2	BBB	
10	BBB-	Baa3	BBB-	
11	BB+	Ba1	BB+	Non Investment Grade Speculative
12	BB	Ba2	BB	
13	BB-	Ba3	BB-	
14	B+	B1	B+	Highly Speculative
15	B	B2	B	
16	B-	B3	B-	
17	CCC+	Caa1	CCC+	Substantial Risks
18	CCC	Caa2	CCC	Extremely Speculative

Update and administrative changes of the Gas Purchase policy

It is recommended that the administrative updates of the policy purpose, definitions, scope, and content clause 9 of the Gas Purchase policy be revised as provided in Attachment A.

STRATEGIC PLAN ALIGNMENT:
This report supports the delivery of core services.

FINANCIAL IMPLICATIONS:
Capital Budget – The recommendation has no impact on the Capital Budget.

Operating Budget – The recommendation has no impact on the Operating Budget.

PREVIOUS REPORTS/AUTHORITIES:

- INS-17-085 3-Year review of Natural Gas Purchasing Policy
- INS-14-014 Natural Gas Purchase Policy Review
- FIN-ACQ-560 Gas Purchase Policy

APPROVED BY: Denise McGoldrick, General Manager, Infrastructure Services

ATTACHMENTS:
Attachment A – Modified Natural Gas Purchase Policy
Attachment B – Current Natural Gas Purchase Policy