

Industry Update on Electricity, Natural Gas and Telecommunications

RECOMMENDATIONS:

That the Community Development Committee recommends that Council:

1. Direct Administration to provide future Industry Updates using Briefing Reports starting in 2022 Q4; and
2. Receive the Report, presentation, and attachment for the Corporate Record.

HIGHLIGHTS

- This report provides a review of policy issues in Alberta's regulated utilities and general utility industry developments that could impact The City's interests. It informs committee members about those that may require future regulatory intervention or impact The City's operations.
- **What does this mean to Calgarians?** Natural gas and electricity prices affect The City's utility costs and franchise fee revenue, and what Calgarians pay for utility services.
- **Why does this matter?** Changes in energy prices and policies may affect The City's budget and operations.
- Natural gas and electricity markets are analyzed to understand the directional change in energy prices and the potential financial implications for The City and Calgary community.
- Key issues:
 - **Alberta natural gas producers face significant discounts reducing their profits.**
 - **New federal electricity regulations to support greenhouse gas emissions reduction would increase electricity prices significantly.**
 - **Rogers Communications outage disables telecommunication services in large parts of Canada.**
- Strategic Alignment to Council's Citizen Priorities: A well-run city

DISCUSSION

This update highlights Alberta's historical and current regulated rates for electricity and natural gas. It also offers an overview of the recent drivers of change in energy markets. The update also summarizes a recent service reliability incident that arose for telecommunication services.

For 2022 September, a summary of the significant developments as at 2022 August 29 is as follows (additional detail is available in Attachment 1):

- **Alberta natural gas producers face significant discounts reducing their profits.** This section addresses the differential between natural gas prices in Alberta and the rest of the world, especially the United States. The main driver of the price differential is the lack of market access for Alberta natural gas producers. This deep discount also impacts the Government of Alberta as royalties are based on the sale price of the commodity in Alberta. Conservative estimates put the lost industry revenue because of these wide discounts at more than \$1 billion per month for 2022 July and 2022 August.
- **New federal electricity regulations to support greenhouse gas emissions reduction would increase electricity prices significantly.** On 2022 July 26, the federal government released a proposed framework for its Clean Electricity Regulations (CERs). The CERs call for a linear decline in greenhouse gas emission intensity to zero by 2035. This legislation is the main driver of an unprecedented increase in more recent electricity

Industry Update on Electricity, Natural Gas and Telecommunications

price forecasts for 2025 and beyond. There was a significant change in electricity price predictions from the 2022 Q2 forecast to the more recently received 2022 Q3 forecast. The new electricity price forecast has prices declining from current highs until 2024 before climbing to prices never seen before in Alberta.

- **Rogers Communications outage disables telecommunication services in large parts of Canada.** On 2022 July 8 at 02:45 AM Mountain Time (the first Friday of the Calgary Stampede), the Rogers telecommunications system went down nationwide. This outage caused significant disruptions in Interac financial transactions and internet connectivity. This outage lasted until mid-day on 2022 July 9. As a result, Rogers Communications has pledged to provide customers rebates, costing up to \$70 million.

STAKEHOLDER ENGAGEMENT AND COMMUNICATION (EXTERNAL)

- Public Communication or Engagement was not required

IMPLICATIONS

Social

Electricity and natural gas are not discretionary items for Calgarians and businesses. As a result, higher costs affect lower-income individuals and households disproportionately. These groups spend a greater share of their income on these essential goods. High utility bills also negatively impact the cost of doing business in Calgary, and these higher costs flow through to Calgarians. Higher prices for natural gas producers result in higher royalty revenues for the Alberta Government. However, these additional resources do not necessarily get directed to services to support these disadvantaged groups.

Environmental

The federal Clean Electricity Regulations (CERs) target renewable power generation. It is part of the move to eliminate greenhouse gas emissions through power generation with the goal of cleaner air in the local vicinity. However, proposed efforts through renewable power generation would still have environmental impacts that do not eliminate greenhouse gas emissions. That's because the CERs focus on direct emissions. They do not explicitly address environmental impacts from lifecycle or upstream emissions. For example, wind turbines require a significant amount of oil to operate and solar panel construction requires a considerable quantity of rare elements. Ultimately, there are environmental trade-offs associated with all sources of electricity generation when one considers direct, lifecycle and upstream emissions.

Economic

The new CERs target net-zero electricity by 2035. Commissioning new power generation units after 2025 will need to consider CER obligations. Recent sharp increases in electricity costs have contributed to significant local inflation. It has represented an impediment to economic growth in Alberta. Future price declines would be short-lived through 2023 and 2024. The federal CERs would likely increase electricity costs significantly starting in 2025. An early estimate of the cost implications for Alberta, provided by EDC associates, indicates that the cost of electricity generation in Alberta would increase by \$45 billion between 2022 and 2036.

Industry Update on Electricity, Natural Gas and Telecommunications

Service and Financial Implications

Increase in rates or fees

The City is a large consumer of electricity and natural gas. As a result, cost increases negatively impact City finances. From 2022 January 1 to 2022 June 30, electricity costs for The Corporation were \$5.7 million higher than over the same period in 2021. This represents a fifteen percent year-over-year increase in total electricity costs. Natural gas cost increases were even more significant at 39 per cent.

RISK

Total City 2022 energy costs have increased by \$8.7 million as of 2022 June 30, compared with the same period in 2021. This represents a nineteen percent year-over-year increase. If the trend holds for the last half of 2022, The City's energy costs may be close to \$20 million higher in 2022 when compared with 2021. The financial impact is significant for 2022 and likely more significant starting in 2025.

ATTACHMENTS

1. Industry Update on Electricity, Natural Gas and Telecommunications
2. Presentation

Department Circulation

General Manager/Director	Department	Approve/Consult/Inform
Carla Male	CPFS	Approve