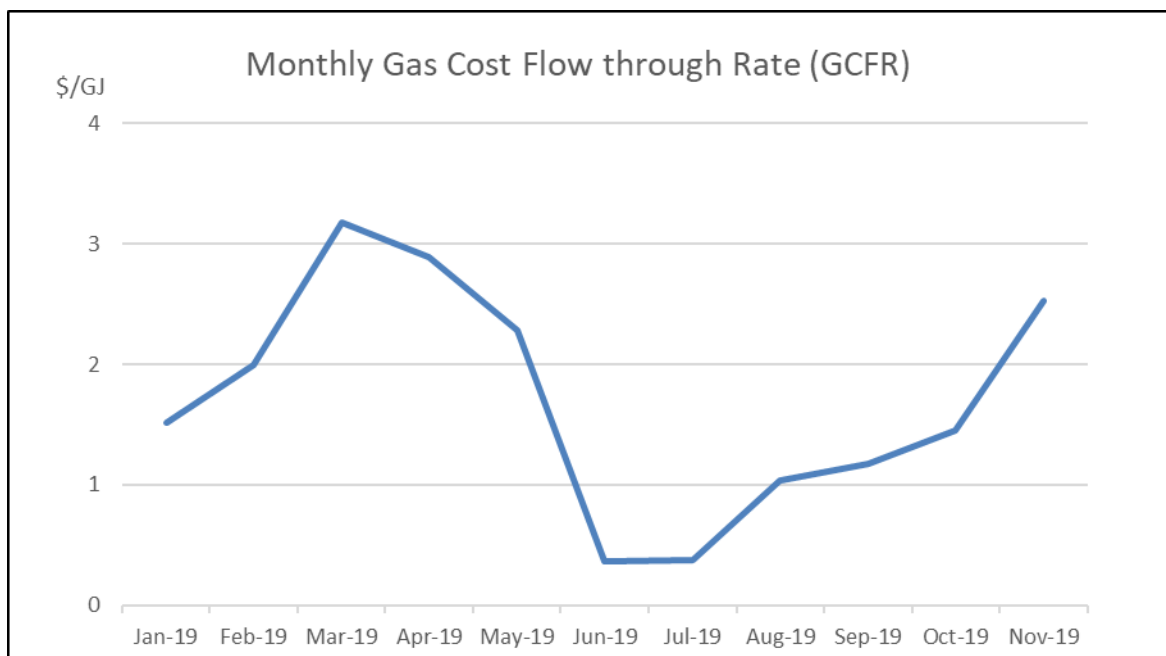
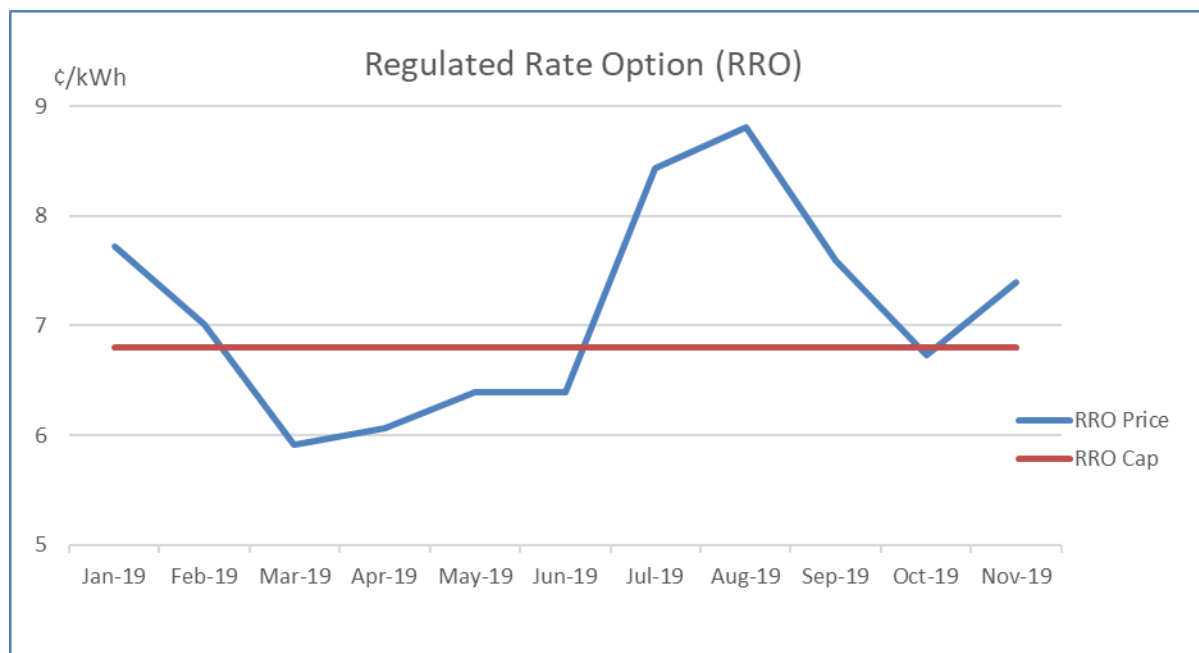


ENERGY PRICES AND MARKETS**Natural Gas**

The 2019 November gas cost flow-through rate (GCFR) was \$2.52 per gigajoule. This is an increase from the exceedingly low prices of the summer months, which averaged \$0.73/GJ. Colder temperatures have largely been responsible for the price increase this fall. Natural gas costs for The City from 2019 January to October are up 1.4 percent (\$108,000) relative to 2018, despite consuming lower volumes of natural gas, due to higher delivery costs.

**Electricity**

The ENMAX regulated rate option (RRO) price for 2019 November was 7.40 cents per kilowatt-hour. The Price Cap of 6.8 cents per kilowatt-hour will no longer be in effect as of 2019 December. Electricity costs for The City from 2019 January to October are up 6.1 percent (\$4.0 million) relative to the same period in 2018, despite lower volumes, due to increased unit costs.



The month-to-date all-hours average price for 2019 November 18 was 5.24 cents per kilowatt-hour. For reference, the all-hours average price for 2018 November was 5.92 cents per kilowatt-hour. Power prices are forecast to remain relatively stable for the remainder 2019 and into next year as well.

UTILITY REGULATION UPDATE

Cancellation of the RRO price cap

The Alberta Government removed the 6.8 cents per kilowatt-hour price cap on the RRO effective 2019 November 30. The cost to Alberta taxpayers of the RRO Cap has been about \$100 million in total.

Technology Innovation and Emissions Reduction (TIER) Regime established

In an effort to maintain provincial control over carbon pricing and revenues, the Alberta government has established its own carbon program for large emitters. Power plants – Alberta's largest emitters and where most emission cuts are expected to occur – are assigned a single benchmark for the entire industry (0.37 t/MWh). Most other facilities, such as oilsands plants and concrete manufacturers, are assigned an individual carbon emissions benchmark based on past performance and are expected to reduce their emissions by 10 per cent below their benchmark during the first year and one per cent every year after that. Facilities with emissions above the benchmark have to pay at the current cost of carbon, or buy emission credits from facilities that have met and exceeded their emission reduction targets.

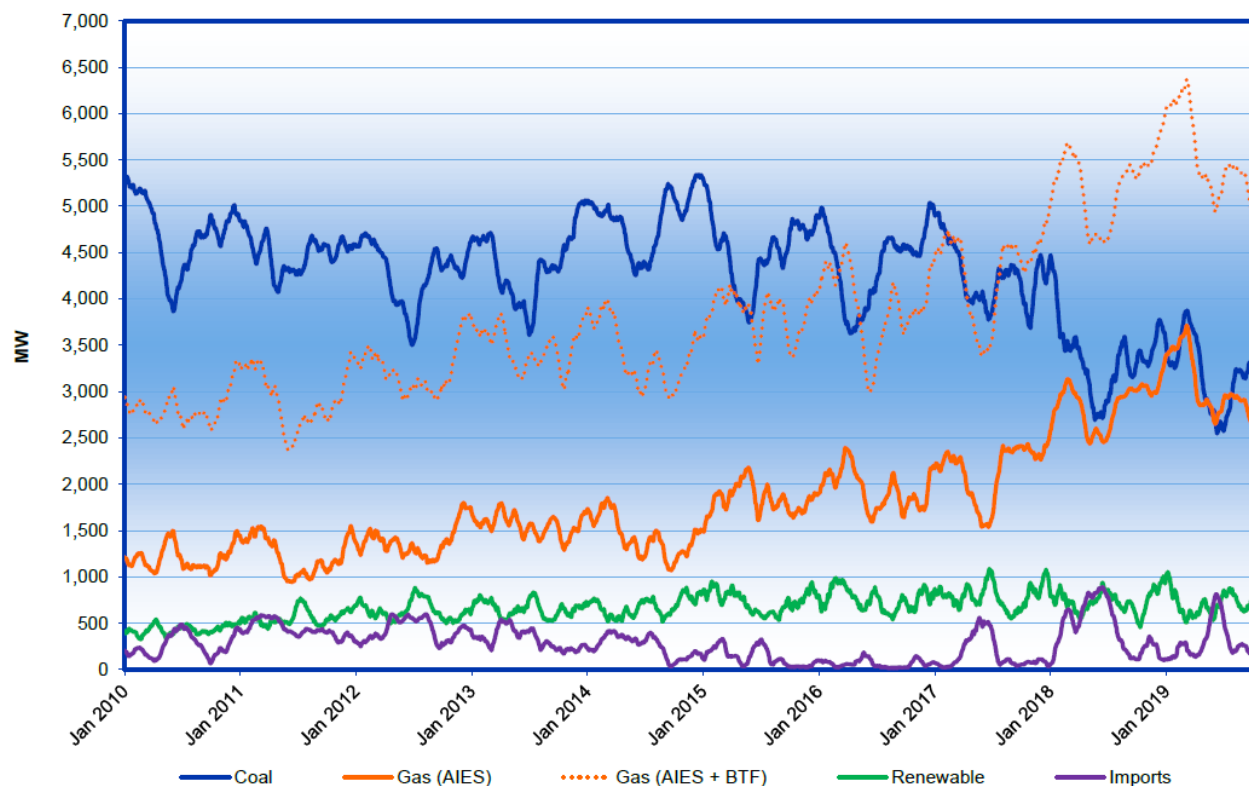
The federal government has confirmed that the TIER program is sufficient and will not be implementing a federal tax on Alberta industry. The federal government implemented its carbon tax on Alberta consumers effective 2020 January 1.

UTILITIES AND INDUSTRY DEVELOPMENTS

Collapse in Coal-Fired Generation Output

The combination of incredibly low AECO-C natural gas prices (at times hitting negative territory), more stringent environmental compliance costs and the retirement/mothballing of certain coal-fired generating units has significantly impacted this segment's energy output. Figure 1 depicts the rolling 30-day average electricity production attributed to coal, natural gas, renewables and imports since 2010, as well as gross natural gas generation (i.e., including behind-the-fence), expressed in terms of MW (i.e., daily MWh production divided by 24 hours). The spread between coal-fired generation (blue line) and natural gas-fired generation (solid orange) has narrowed substantially, with gross natural gas-fired generation (dashed orange) over-taking coal-fired output late 2017.

Figure 1 – 30-Day Rolling Average Generation and Imports

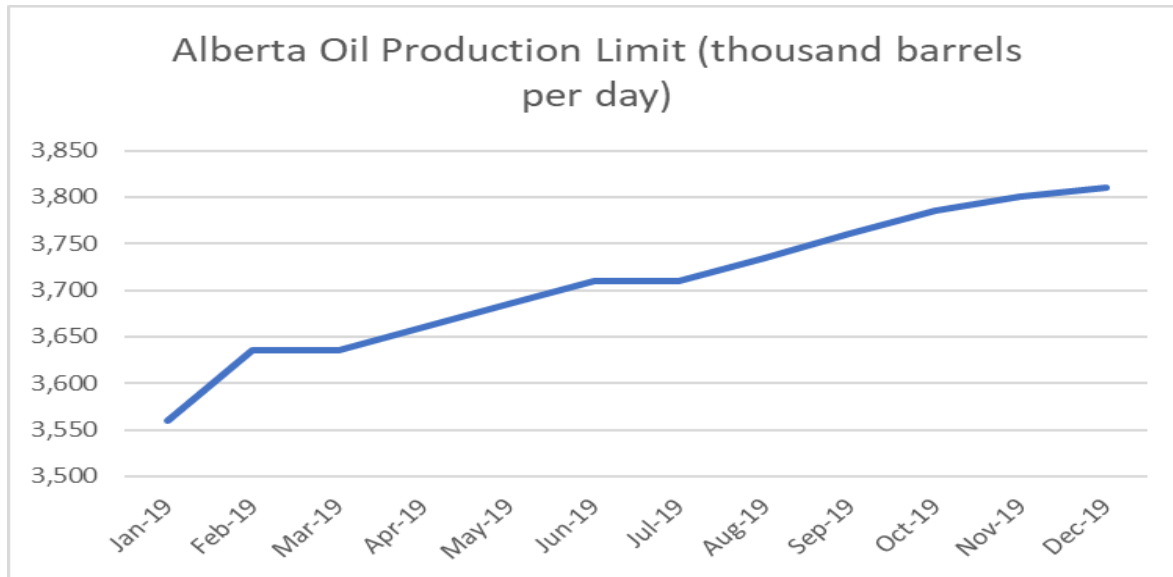


Source - EDC Associates Q4-2010 Forecast update

Acronyms in the graph legend - AIES = Alberta Interconnected Electric System, BTF = Behind The Fence

Oil Production curtailments extended

Beginning in 2019 January the Alberta government instituted an 8.7% or 325,000 barrel per day oil curtailment in an attempt to reduce the price differential between Western Canada Select (WCS) and West Texas Intermediate (WTI). The oil curtailments have been ratcheted down in tranches in 2019.



Currently about 100,000 barrels per day of oil remains curtailed. The oil curtailments have been extended to 2022 December 31. In order to reduce the impact to small producers, the limits will apply to companies that produce more than 20,000 barrels per day rather than the original 10,000 barrel per day limit. This means that only 16, instead of 29, of the province's more than 300 operators will be affected. However effective 2019 November 8 new wells drilled for conventional oil will be exempt from the production limit. The government hopes that the exemption will encourage the drilling of new conventional oil wells, as well as, increase investment and create more jobs.