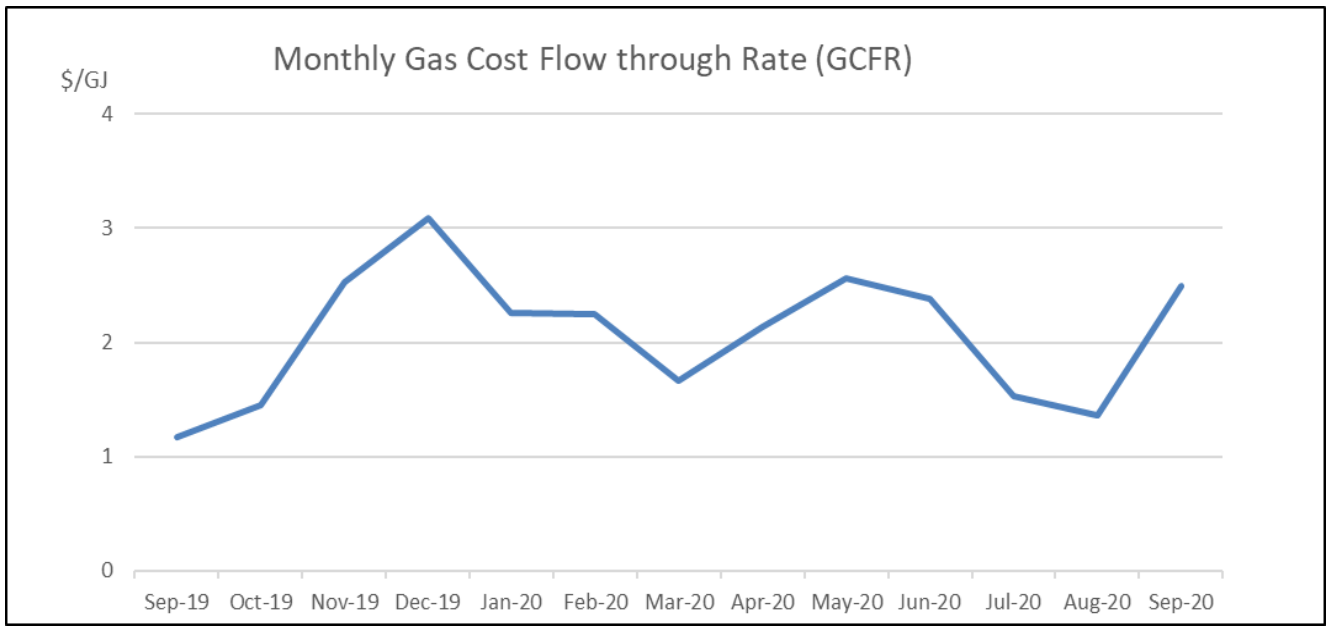
ENERGY PRICES AND MARKETS

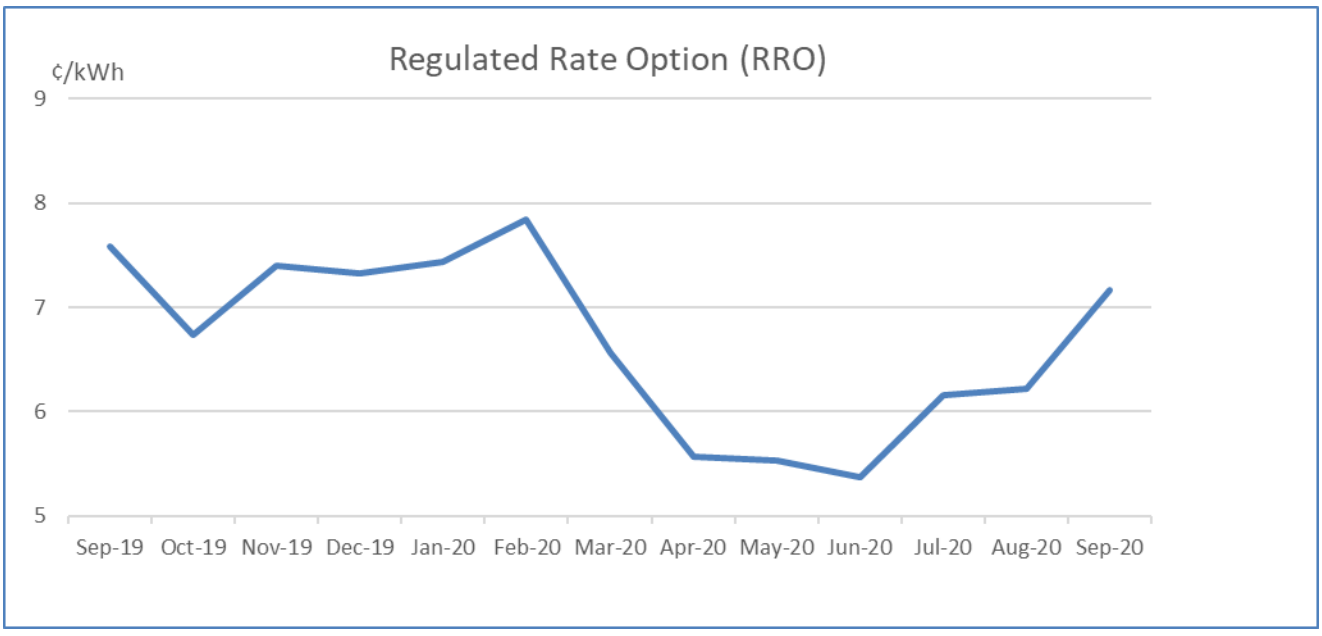
Natural Gas

The 2020 September gas cost flow-through rate (GCFR) was $2.49 per gigajoule. Prices are forecast to remain stable for the remainder of 2020. Natural gas costs for The City thus far in 2020 are 5.4 percent ($349,000) lower relative to 2019, largely due to a warmer winter in 2020.



Electricity

The ENMAX regulated rate option (RRO) price for 2020 September was 7.17 cents per kilowatt-hour. The price cap of 6.8 cents per kilowatt-hour is no longer in effect as of 2019 December. Electricity costs for The City thus far in 2020 are 4.2 per cent ($2,000,000) lower relative to 2019, largely due to decreased transit electricity usage.

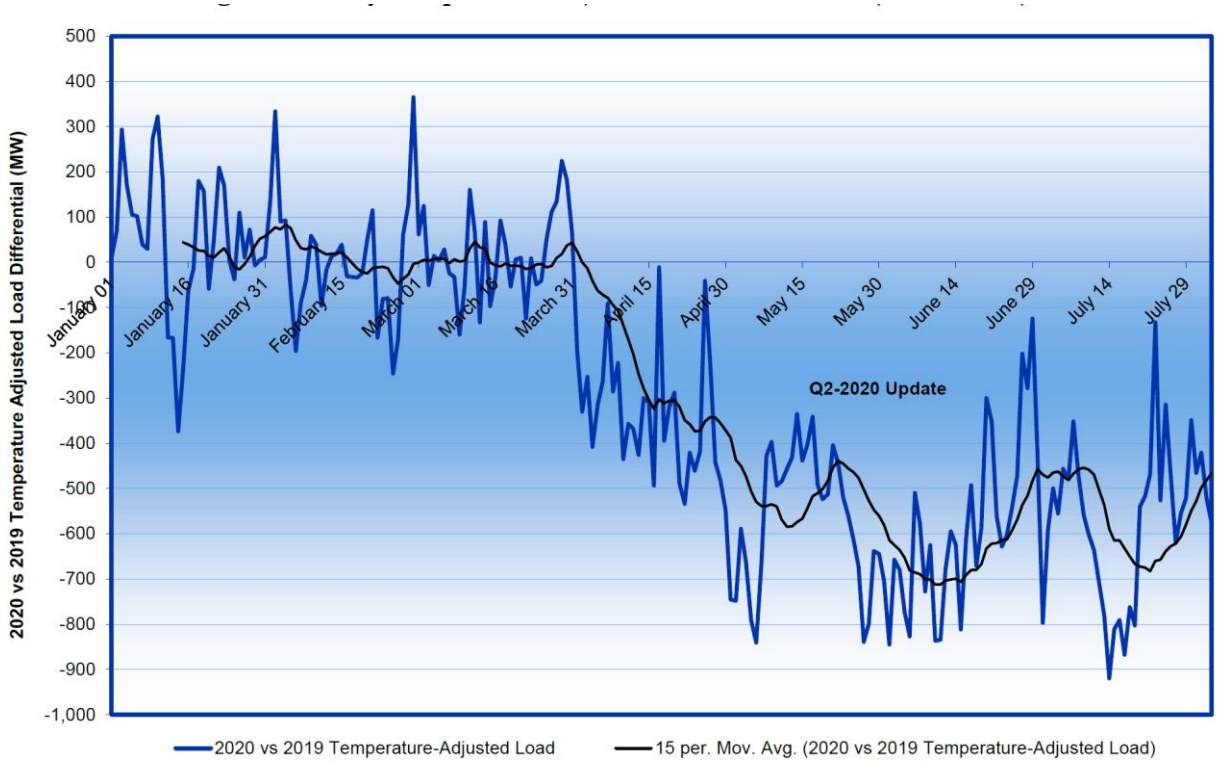


The month-to-date all-hours average power pool price for 2020 September 14 was 3.75 cents per kilowatt-hour. For reference, the all-hours average price for 2019 September was 5.45 cents per kilowatt-hour. Power pool prices are forecast to remain at approximately 5 cents per kilowatt-hour for the remainder of 2020.

UTILITIES AND INDUSTRY DEVELOPMENTS

Impact of COVID-19 and Low Oil Prices on Alberta Electricity demand

Beginning in 2020 April the economic shutdown began to impact provincial electricity demand. Daily temperature adjusted load was over 800 MW lower in the beginning of May on a year-over-year basis. By mid-May electricity consumption had begun to improve. Currently demand destruction is sitting at about 500 MW. The graph below shows the daily temperature adjusted load differential (2020 vs 2019).



*Source – EDC Associates Q3-2020 update

The good news, is that electricity demand is expected to strengthen over the coming months as comparatively stronger oil prices has led some oil producers to restart shut-in oil production.

Alberta Government Supports Small Modular Nuclear Reactor development

Alberta is joining three other provinces to support the advancement and deployment of nuclear energy through small modular reactors (SMRs). Premier Jason Kenney announced 2020 August 7 that the Alberta provincial government will sign on to an existing memorandum of understanding with Ontario, Saskatchewan and New Brunswick. The province hopes the nuclear technology will allow power to be provided to remote communities, diversify the economy, create jobs and reduce greenhouse gas emissions. The intent is for Alberta to stay at

the forefront of the latest development in SMR technology and to ensure that the province will have the appropriate regulatory framework in place, should private industry decide to pursue it in the future.

Halkirk residents concerned with consultation process on new Wind farm

Residents of Halkirk, Alberta (about 2.5 hours NE of Calgary) have recently raised concerns about the consultation process undertaken by Capital Power regarding a proposed Wind farm in the area. Capital Power has proposed a 74 turbine site spread over 100 square kilometers. One resident in particular stated that Capital Power "tricked" him into signing his consent in exchange for $10 by telling him his neighbors were all in agreement with the project. He was promised more money once the turbines were operational. He later learned that many of his neighbours had not given consent.

Further, the Wind farm plans would see a turbine just 650 metres from a local landing strip, despite recommendations from Transport Canada that turbines should be at least four kilometres from a runway. The Alberta Utilities Commission (AUC) approved the Capital Power project as being in the public interest. The AUC put 24 conditions on the project's approval, which the company must meet to complete it. Capital Power has not yet begun construction and must complete this project no later than 2022 December.

TELECOMMUNICATIONS DEVELOPMENTS

SpaceX launch of Starlink internet satellites continues

Global, wireless internet service could be a reality as early as 2021. Starlink (an affiliate company to Elon Musk's SpaceX) is a space-based internet service provider that seeks to provide high-speed internet service (100 mbps or enough to watch two HD movies at once). The company is planning near-global coverage of the populated world by 2021, bringing this service to locations where access previously has been unreliable, expensive or completely unavailable. Starlink has announced that once its fleet of 840 low-earth orbit satellites (about 550 km altitude) are operational it will be ready to offer service to customers.

The hardware required to access the Starlink satellites has been kept secret up until recently when a 2020 June 23 Business Insider article showed photographs of the new user terminal. The dish antenna is approximately the size of a medium pizza, though it is not entirely clear how large or heavy the entire assembly will be. Elon Musk has stated the Starlink system setup will involve only two steps "plug-in, and point at the sky". It is not yet clear if this level of simplicity will be available in the immediate future.

Because Canada is such a large and sparsely populated country reliable internet service has typically relied on Federal support. This service could allow many rural and remote communities a market-based solution to connect to the internet. The Resilience Calgary strategy (Action 1B.1) which addresses internet access and affordability may be positively impacted if the Starlink system works as expected.