



TC Energy
Power Market
update.

Forward prices table (indicative as of October 3, 2019)

	Flat 7x24 (\$/MWh)	AB - 7x16 On Peak (\$/MWh)	AB - 7x8 Off-Peak (\$/MWh)	AECO Gas (\$/GJ)	Heat Rate
BOM	\$50.00	\$63.00	\$32.00	\$1.65	30.30303
November	\$60.25	\$75.00	\$43.00	\$1.84	32.74457
BOY	\$61.25	\$75.75	\$43.50	\$1.96	31.25000
2020	\$56.75	\$69.25	\$39.00	\$1.74	32.61494
2021	\$58.25	\$73.50	\$36.75	\$1.78	32.72472
2022	\$54.75	\$68.00	\$36.75	\$1.92	28.51563

All prices are indicative as of October 3, 2019. For Firm power price quotes please contact TC Energy's Power Marketing team. See contacts on the last page.

Alberta market recap – September 2019

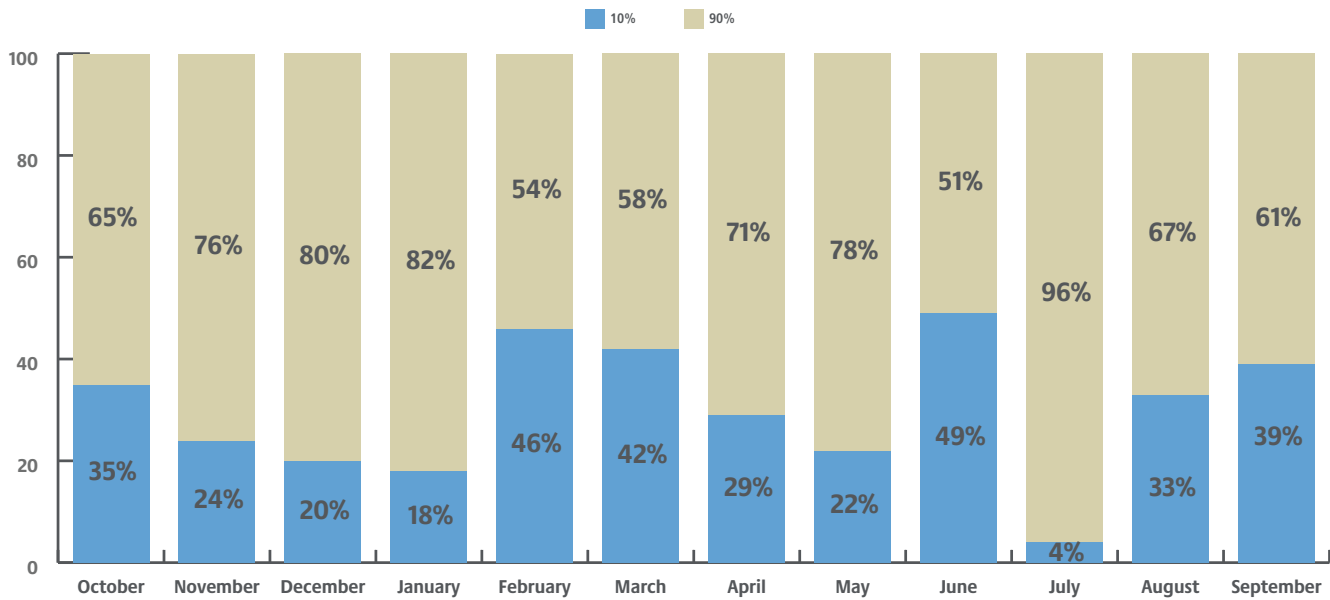
September 2019 settled at \$54.45/MWh, representing a 51% increase from September 2018's settle of \$36.11/MWh and a 20% increase from last month's settle of \$45.40/MWh. The average price between the on-peak and off-peak for September differed by \$32.74/MWh, resulting in on-peak and off-peak prices of \$65.37/MWh and \$32.63/MWh respectively.

There were five influential days of pricing in September; September 11th, 12th, 16th, 18th and 27th settling at \$176.00, \$85.91, \$188.33, \$123.98 and \$87.17 per MWh respectively. September 11th price drivers can be attributed to Keephills 3's trip and extended return time, no wind presence, the 1201L outage reducing both the BC and MATL tie lines to OMW as well as depleted coal and gas fleets. Despite moderate wind and higher baseload generation, September 12th saw a decrease of 200MW on Sundance 6. Paired with the 1201L outage, System Marginal Price (SMP) rose above \$900/MWh. For the highest daily settle of the month (September 16th), a similar supply issue occurred, this time with Sundance 4 accompanying Sundance 6 in unit output decreases, combined with low wind and

the continued 1201L outage. September 18th prices were mainly impacted by a decrease in output on Sheerness 1 & 2, negligible wind presence and 1201L's continued outage. Declining temps caused stronger than expected load September 27th, further low wind presence and an outage on Keephills 1 held prices in the triple digits for multiple hours.

***FORWARD-LOOKING INFORMATION** This publication contains certain information that is forward looking and is intended to provide useful and timely information to Alberta power market participants. All information is from sources deemed reliable and is subject to errors and omissions which we believe to be correct, however, assume no responsibility for. The words "anticipate", "forecast", "expect", "believe", "may", "should", "estimate", "plan" or other similar words are used to identify such forward-looking information. All forward-looking statements reflect TC Energy's beliefs and assumptions based on information available at the time of this publication and are not guarantees of future performance. By their nature, forward-looking statements are subject to various assumptions, risks and uncertainties which could cause actual outcomes to differ materially from the anticipated results or expectations expressed or implied in such statements. Readers are cautioned against placing undue reliance on forward-looking information and not to use future-oriented information or financial outlooks for anything other than their intended purpose. TC Energy undertakes no obligation to update or revise any forward-looking information except as required by law.*

Hours contributing to monthly average price



The top 10% of high-priced hours averaged \$209.94/MWh, contributing 39% to the monthly settle while the bottom 90% of hours averaged \$37.18/MWh.

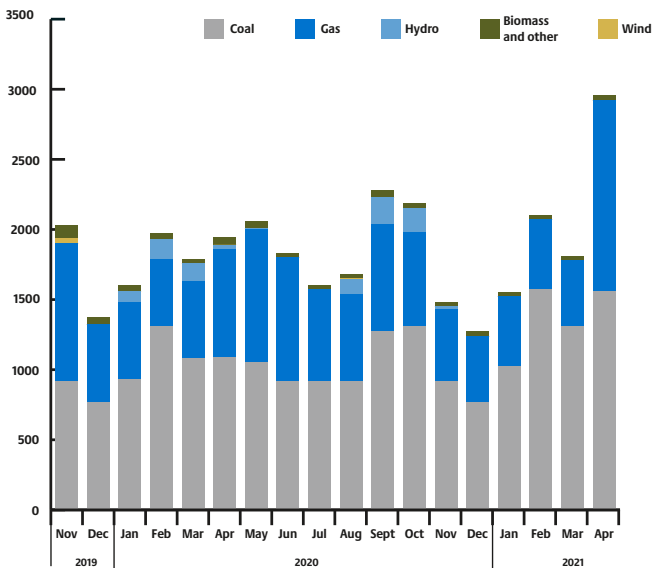
Average Alberta Internal Load (AIL) for the month was 9,159 MW, with peak load hitting 10,225 MW on September 5th, 2019. This represents a 1% decrease from September 2018's average AIL of 9,290 MW and a 2% increase from its peak load of 10,049 MW.

The weighted average temperature across the province for September was 10.9°C representing a 4.6°C increase from last September when the average was 6.3°C. Alberta saw a wide range in weighted average temperatures across the month with September 15th reaching 31°C in Medicine Hat to overnight lows of -11°C in Lethbridge on September 30th.

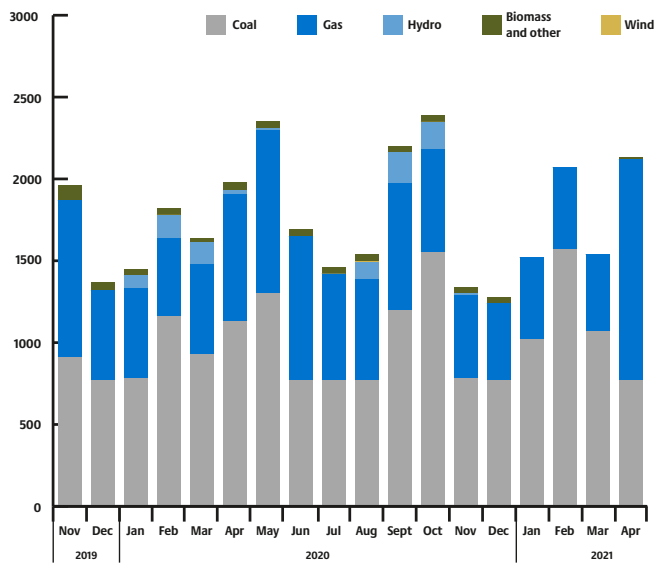
Monthly outages

Since last month's outage report there has been three noteworthy outage adjustments, two being decrease's in coal outages of roughly 250 MW occurring May and October 2020 and an increase in coal outages of nearly 800MW occurring April 2021.

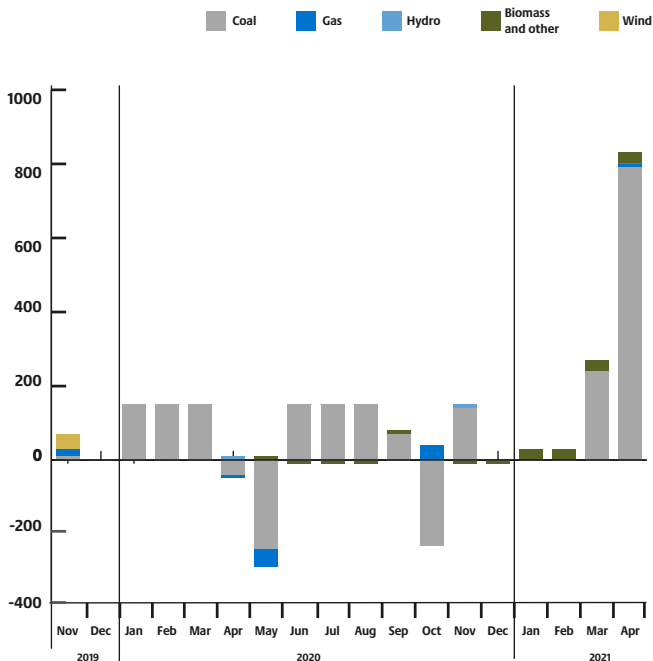
AESO monthly outages (as of October 2019)



AESO monthly outages (as of September 2019)



Month-over-month change in outages (Sep 2019 over Oct 2019)

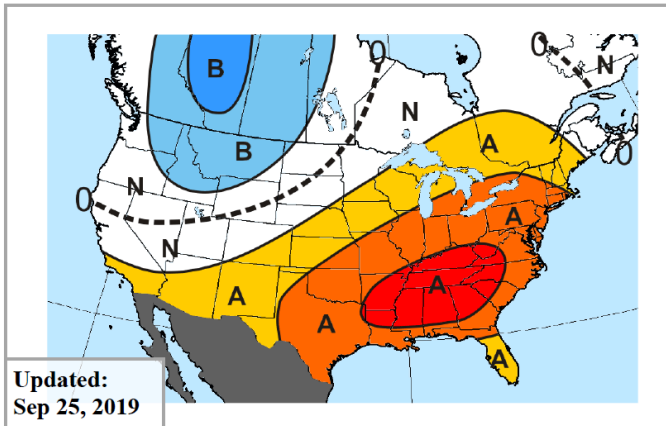


Radiant solutions 30-60 day outlook

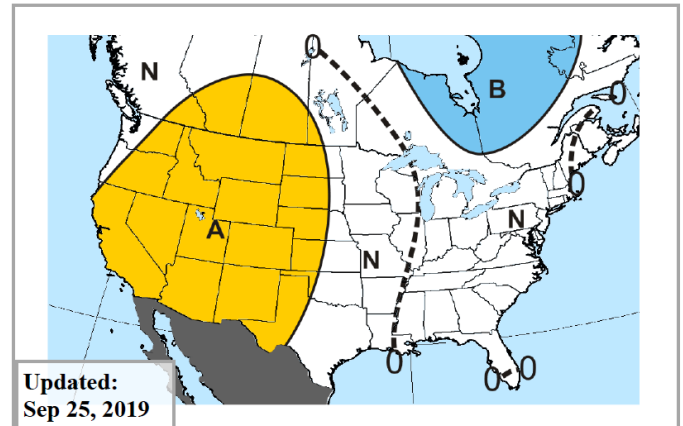
September remained on record warm pace. While Radiant Solutions 30/60 outlook for September was warm, they underestimated the intensity of warmth across the Central and Southern US, while the final 30 Day outlook was too warm in the West.

Radiant Solutions forecasts that October will undergo significant warm changes across the eastern half where widespread aboves are now projected. Meanwhile cool changes take place in the West with belows in the Northwest/Northern Rockies. They currently indicate that Alberta will see a -1.0°F to -2.9°F departure from average 1981-2010 normal temperatures.

October 2019



November 2019



Industry News

TC Energy recently signed an eight-year power purchase agreement (PPA) with Perimeter Solar Inc. (Perimeter) for 74 megawatts (MW) of capacity. Under the terms of the agreement, Perimeter will construct the project by the end of 2020 utilizing approximately 450,000 photovoltaic modules. Once constructed, the project will provide enough electricity to power 39,000 homes. The 132 MW solar farm will be built on 1,200 acres of land east of Claresholm, AB with the power generated by the solar farm feeding directly into the provincial grid.

Earlier this week, Canadian Utilities Limited (CU) completed the sale of their natural gas-fired and coal-fired electricity generating assets to Heartland Generation Ltd., an affiliate of Energy Capital Partners. These assets located in Alberta and British Columbia have a combined generating capacity of approximately 1,800MW.

TransAlta Corp. announced that they are partnering with SemCAMS Midstream ULC to build a power-and-steam cogeneration facility at a natural gas processing plant near Fox Creek in northern Alberta. TransAlta will pay for and construct the 40MW plant while SemCAMS has agreed to buy a 50% stake when it begins operating in late 2021. All the steam produced at the facility and roughly half of the electricity are to be sold to SemCAMS under a 13-year fixed price contract, with the remainder of the electricity sold into the Alberta grid.

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