TC Energy

POWER MARKET UPDATE

FORWARD PRICES TABLE (INDICATIVE AS OF APRIL 3, 2023)

	Flat 7x24 ($/MWh)	AB - 7x16 On Peak ($/MWh)	AB – 7x8 Off-Peak ($/MWh)	AECO Gas ($/GJ)	Heat Rate
BoM	$115.00	$130.31	$84.38	$2.44	47.13115
May	$116.00	$141.52	$64.95	$2.17	53.45622
BoY	$143.39	$177.82	$74.59	$2.36	60.75847
2024	$93.61	$111.52	$57.79	$3.26	28.71472
2025	$78.25	$93.50	$47.75	$4.07	19.22604
2026	$73.50	$88.97	$47.75	$4.19	17.54177

All prices are indicative as of April 3rd, 2023. For Firm power price quotes please contact TC Energy's Power Marketing team. See contacts on the last page.

[1]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.

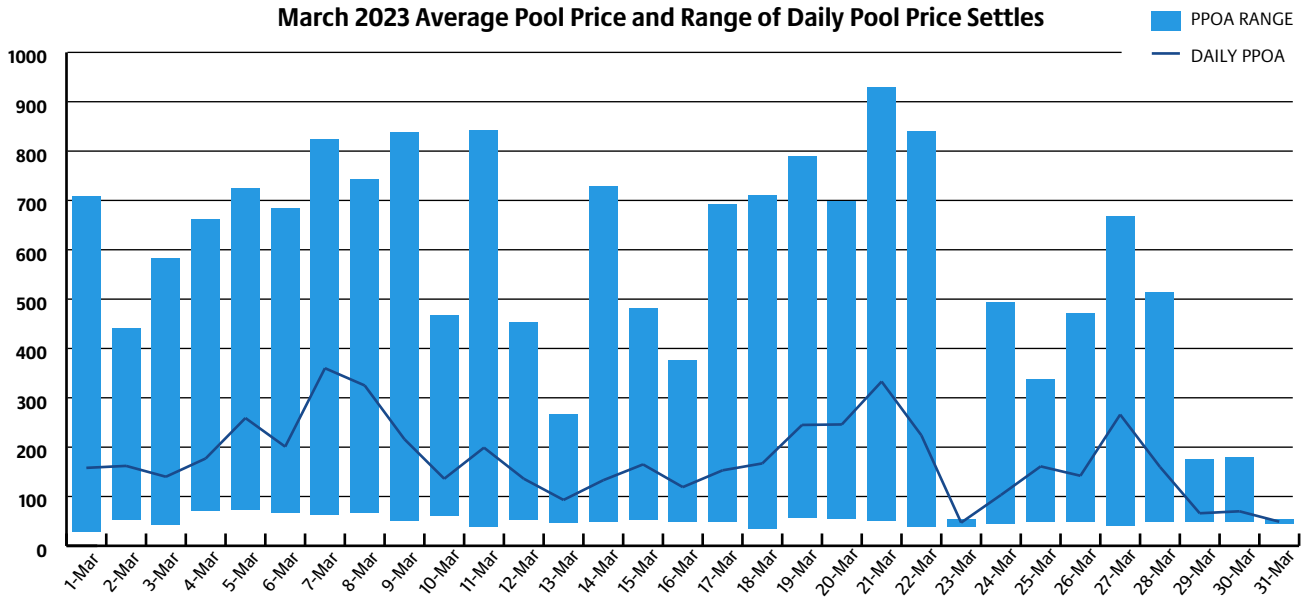
ALBERTA MARKET RECAP — MARCH 2023

March 2023 settled at $174.63/MWh, representing a 132% increase from March 2022's settle of $75.38/MWh, and a 41% increase from last month's settle of $123.50/MWh. The maximum pool price was $929.43/MWh for March, compared to the maximum pool price settle of $870.75/MWh in February. The average price between the on-peak and off-peak for March differed by $9.97/MWh, resulting in on-peak and off-peak prices of $177.90/MWh and $167.93/MWh, respectively. March forwards traded between $133.50 and $175.81, 30 days preceding the month.

March 2023 had 26 triple digit daily settles, occurring on all days of the month except for March 13th, 23rd, and 29th-31st. these triple digit settles ranged from a 'low' of $103.36/MWh on March 24th to a 'high' of $360.24/MWh on March 7th. The month saw 298 hours settle above $100/MWh, with the SMP peaking at $943/MWh on March 21st during HE (Hour Ending) 22. We have included a new chart on the following page, showing the minimum and maximum daily price settles as bar ranges and the average daily price settle as a line graph to demonstrate the volatility in the market this month.

March 7th saw the highest daily average and on-peak price settles of $360.24/MWh and $409.32/MWh, respectively, whereas March 9th saw the highest daily off-peak price settle of $373.01/MWh. March 7th saw increased price volatility due to lower-than-average daily wind generation, around 445 MW or 12% CF, a strong daily load profile of 10,564 MW (338 MW higher than the monthly average), and multiple large thermal units offline, such as Shepard and Battle River 4, setting the daily gas availability factor at 76.3%. by March 9th, Shepard had returned online but was offset by the Genesee 1 outage, and similar market fundamentals previously mentioned were observed during this off-peak period.

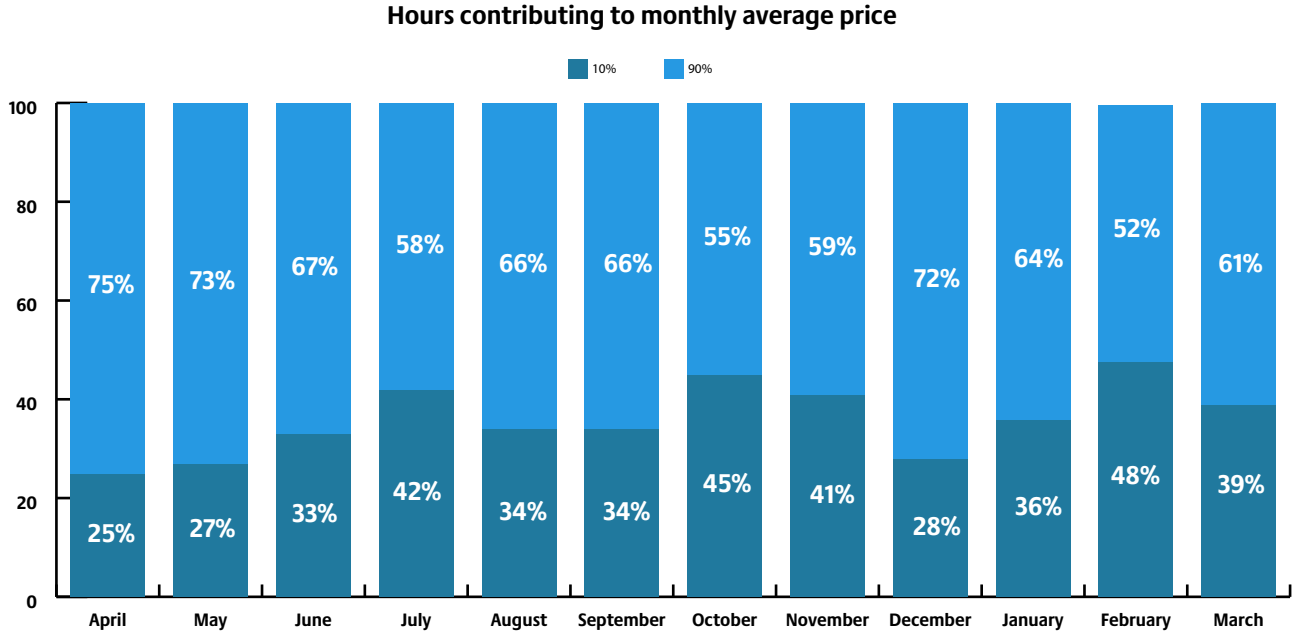
Conversely, March 23rd saw the lowest daily average, on-peak and off-peak price settles of $47.15/MWh, $47.86/MWh, and $45.74/MWh. These lower hourly settles were a result of warmer temperatures and a softer load profile, averaging at 10,041 MW (185 MW lower than the monthly average). Renewable generation showed a strong daily profile for both wind and solar on this day, averaging at a 43% and 32% CF, respectively. Wind and solar generation also peaked above 1,900 MW (52% CF) and 1,000 MW (85% CF), respectively. Lesser thermal outages increased the gas availability factor closer to 80%.



Average Alberta Internal Load (AIL) for the month was 10,226 MW, with hourly peak load hitting 11,062 MW on March 13th HE 10. This represents a 1.6% increase from March 2022's average AIL of 10,070 MW and a 0.3% increase from its hourly peak load of 11,025 MW.

The weighted average temperature across the province for March was -7.53°C representing a 5.47°C decrease from last March when the average was -2.10°C. March 2023 temperatures in Alberta ranged from a high of 11°C in Calgary on March 31st HE 14-16 to a low of -28°C seen in Fort McMurray on March 5th HE 7.

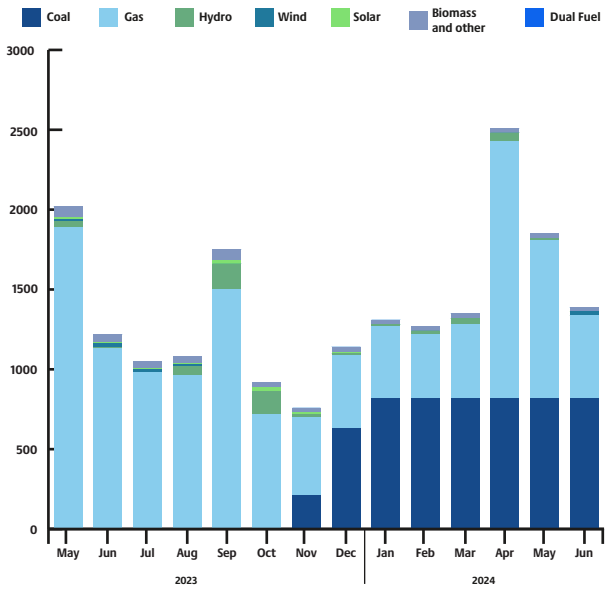
The top 10% of high-priced hours for March averaged $671.72/MWh, contributing 39% to the monthly settle, while the bottom 90% of hours averaged $118.82/MWh.



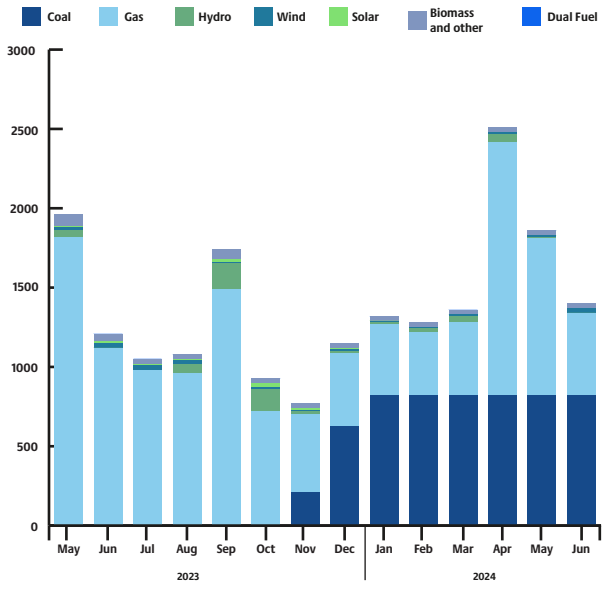
MONTHLY OUTAGES

Since last month's outage report, there has been one noteworthy change in gas outages. Gas outages increased by 100 MW in May 2023 by 70 MW.

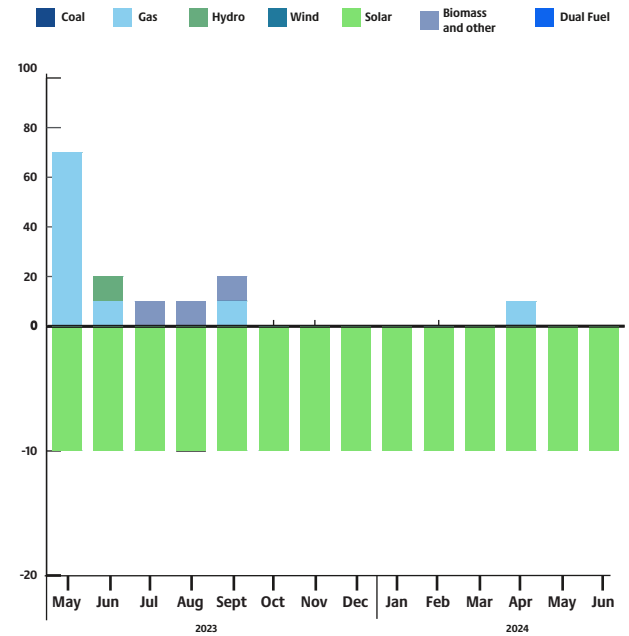
AESO monthly outages (as of April 2023)



AESO monthly outages (March 2023)



Month-over-month change in outages (April 2023 over March 2023)

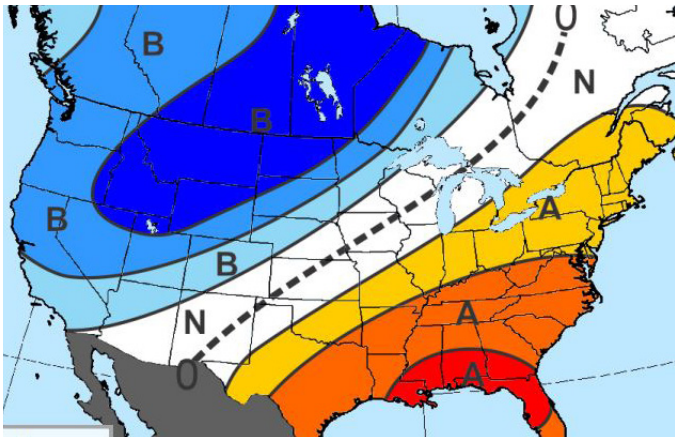


MAXAR'S 30-60 DAY OUTLOOK

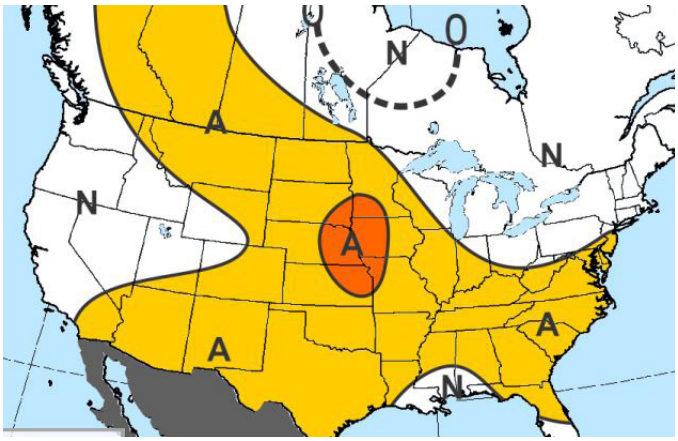
Maxar's final April monthly outlook undergoes a mix of changes, trending notably warmer across the eastern half while additionally colder in the West. The net result decreases the GWHDD (Gas-Weighted Heating Degree days) forecast to 335, below the 10-year and 30-year normals. Aside from a temporary buildup of ridging along the West Coast that models show for the second week of April, in general the pattern is expected to remain reflective of the –PNA (Pacific/North Atlantic) pattern that has been seen for the better part of the last several weeks, which is favored by the long term –PDO (Pacific Decadal Oscillation). The weeklies models are generally cooler than our forecast, with the CFS (Climate Forecast System) coming in much cooler across the eastern half and the ECMWF (European Centre for Medium-Range Weather Forecasts) cooler in the West.

May remains unchanged, with widespread aboves from the Southwest and Rockies to the Plains, Midwest, Southeast, and Mid-Atlantic. The forecast yields below normal Total Degree Days (TDD = GWHDD + PWCDD) at 263 (10Y 273 / 30Y 272). Forecast influences include warm western-tropical Pacific waters, -PDO, and the +AMO (Atlantic Multidecadal Oscillation) which gains more influence in the cooling season. California is a spot where cooler risks are possible given recent and ongoing wetness—the average of the Top 10 April 1 snowpack years pushed forward to May yields 133 normalized GWHDDs (30Y: 111) and 32 PWCDDs (30Y: 41) for CAISO. These years were generally cool elsewhere in the Southwest as well.

April 2023



May 2023



≥+5.0 | +3.0 to +4.9 | +2.0 to +2.9 | +1.0 to +1.9 | -0.9 to 0.9 | 0 | -1.0 to -1.9 | -2.0 to -2.9 | -3.0 to -4.9 | ≤-5.0

CONTACT US

Steve Quehl
Manager, Trading & Marketing
403-920-5661
steven_quehl@tcenergy.com

Kevin Gongora
Power and Emissions Marketer
403-477-4928
kevin_gongora@tcenergy.com