TC Energy

POWER MARKET UPDATE

FORWARD PRICES TABLE (INDICATIVE AS OF AUGUST 1ST, 2023)

	Flat 7x24 ($/MWh)	AB - 7x16 On Peak ($/MWh)	AB – 7x8 Off-Peak ($/MWh)	AECO Gas ($/GJ)	Heat Rate
BoM	$202.90	$256.55	$95.62	$2.38	85.40281
September	$205.00	$261.00	$93.00	$2.39	85.59856
BoY	$167.75	$205.07	$93.26	$2.82	59.55974
2024	$96.99	$114.84	$61.73	$3.05	31.80521
2025	$70.24	$84.50	$41.75	$3.62	19.39689
2026	$70.75	$84.25	$43.75	$3.77	18.77903

All prices are indicative as of August 1st, 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.

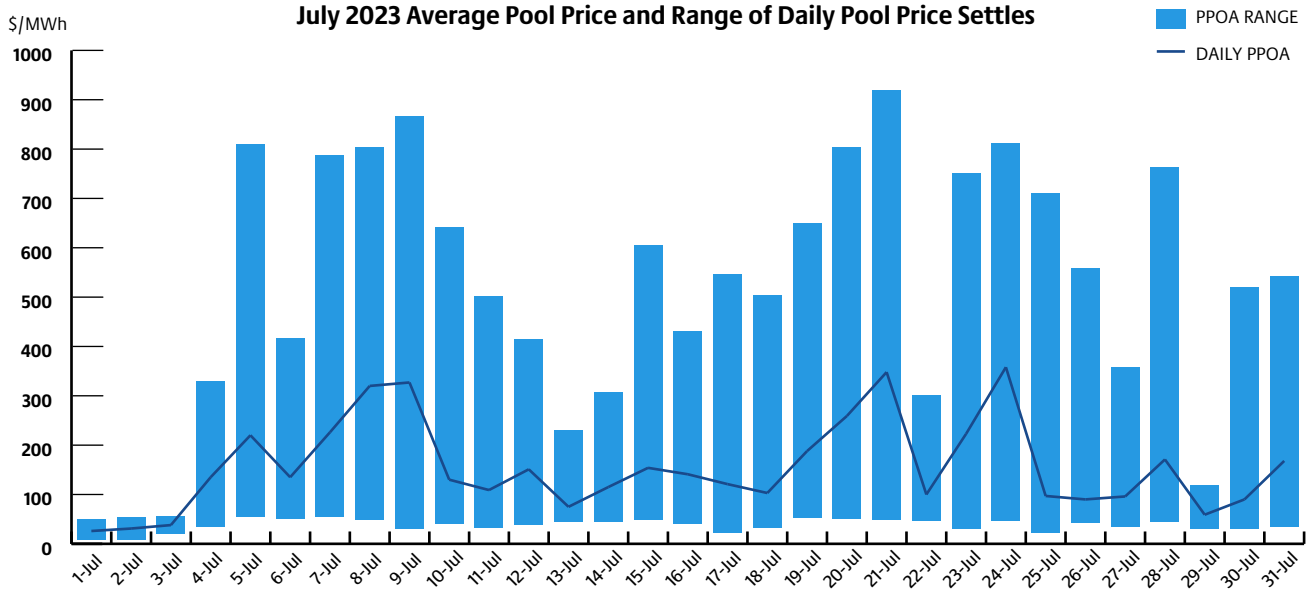
ALBERTA MARKET RECAP — JULY 2023

July 2023 settled at $155/MWh, representing 10% increase from July 2022's settle of $141.55/MWh and a 16% decrease from June's settle of $184.41/MWh. The maximum pool price was $919.14/MWh for July, compared to the maximum pool price settle of $999.99/MWh in June. The average price between the on-peak and off-peak for July differed by $87.96/MWh, resulting in on-peak and off-peak price settles of $184.32/MWh and $96.36/MWh, respectively. July forward traded between $215.50 and $241.50, 30 days preceding the month.

July 2023 had twenty-two triple digit daily settles, occurring all days in July, except for July 1st-3rd, 13th, 25th-27th, and 29th-30th. These triple digit settles ranged from a 'low' of $100.28/MWh on July 18th to a 'high' of $358.16/MWh on July 24th. The month saw 271 hours settle about $100/MWh, with the SMP peaking at $970.37/MWh on July 25th during HE 16.

July 24th saw the highest daily average and on-peak price settles of $358.16/MWh and $500.34/MWh, respectively, whereas July 16th saw the highest off-peak price settle of $202.92/MWh. On July 24th, temperatures reached highs of 38°C in parts of the province, contributing to a strong demand profile. Average load came in 597 MW higher than the monthly average and peaked at the monthly high of 11,522 MW. Wind generation varied significantly throughout the day, from 68 MW in the afternoon to over 2,100 MW late in the day. Coal and gas availability factors were 96.3% and 75.3%, respectively, contributing to the ~2,700 MW of outages in the province. During on-peak hours, a combined 388 MWh of imports were flowing from the AB and MATL interties, whereas an average of 42 MWh of exports were observed on the SK intertie.

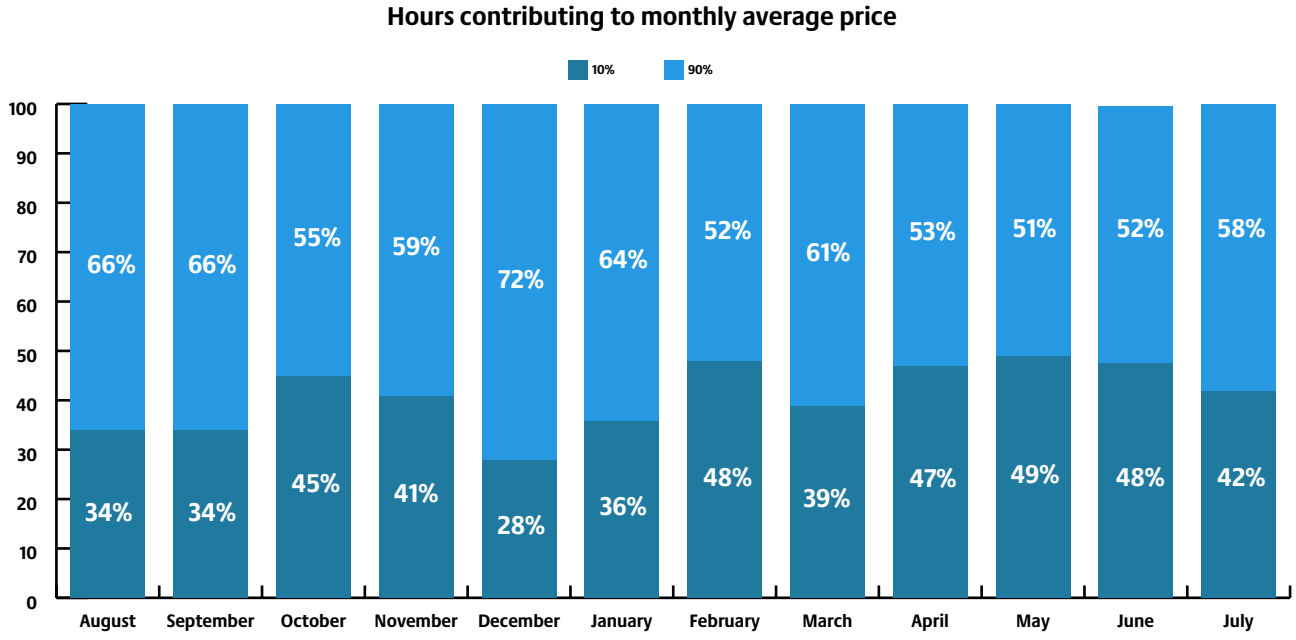
Conversely, July 1st saw the lowest daily average, on-peak, and off-peak price settles of $25.91/MWh, $21.86/MWh and $34.02/MWh, respectively. On this day, load average at 9,719 MW and peaked at 10,351 MW, both lower than the monthly averages. Wind generation capacity factor was 41%, which was twice as high the monthly average. Solar generation maintained above 1,000 MW from HE 11 through HE 17. The interties were mostly flat during the on-peak hours and a minor net exporter during off-peak hours on the MATL and SK ties.



Average Alberta Internal Load (AIL) for the month was 9,886 MW, with hourly peak load hitting 11,522 MW on July 24th HE 18. This represents a 0.3% increase from July 2022's average AIL of 9,853 MW and an 1.2% increase from its hourly peak load of 11,381 MW.

The weighted average temperature across the province for July was 17.93°C representing a 0.65°C decrease from last July when the average was 18.59°C. July 2023 temperatures in Alberta ranged from a high of 38°C in Medicine Hat on July 24th HE18-19 to a low of 6°C seen in Lethbridge on July 27th HE 6-7, Grand Prairie and Edmonton on July 28th HE 6-7.

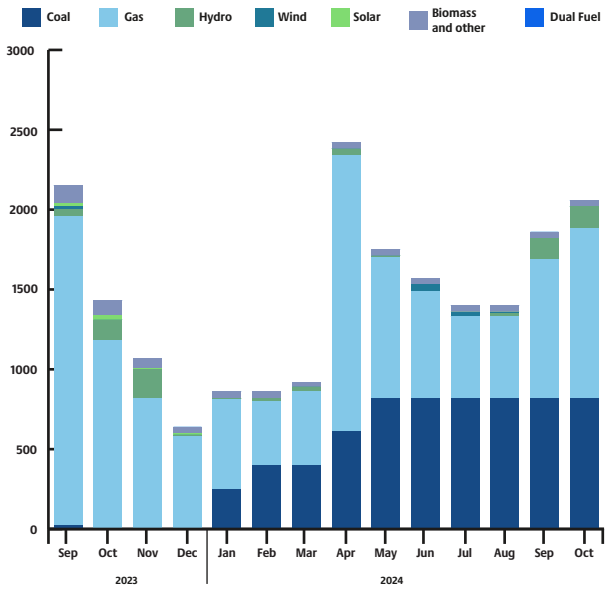
The top 10% of high-priced hours for July averaged $656.86/MWh, contributing 42% to the monthly settle, while the bottom 90% of hours averaged $99.57/MWh.



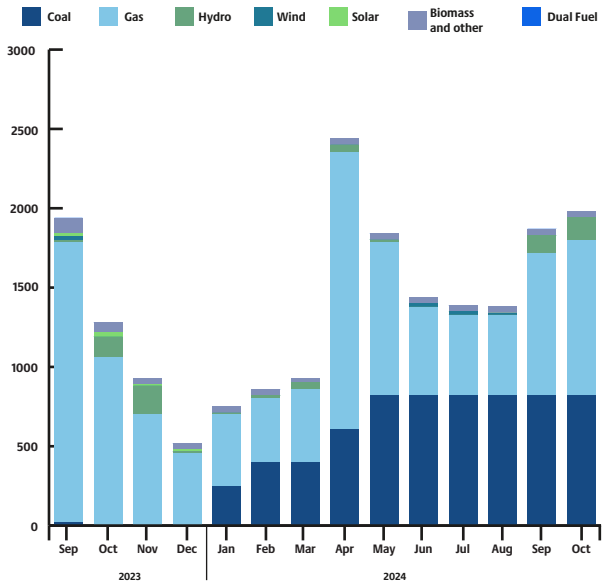
MONTHLY OUTAGES

Since last month's outage report, there have been noteworthy changes in gas outages. Gas outages increased in September 2023 through January 2024 and June 2024, with monthly volumes varying from 110 MW to 170 MW.

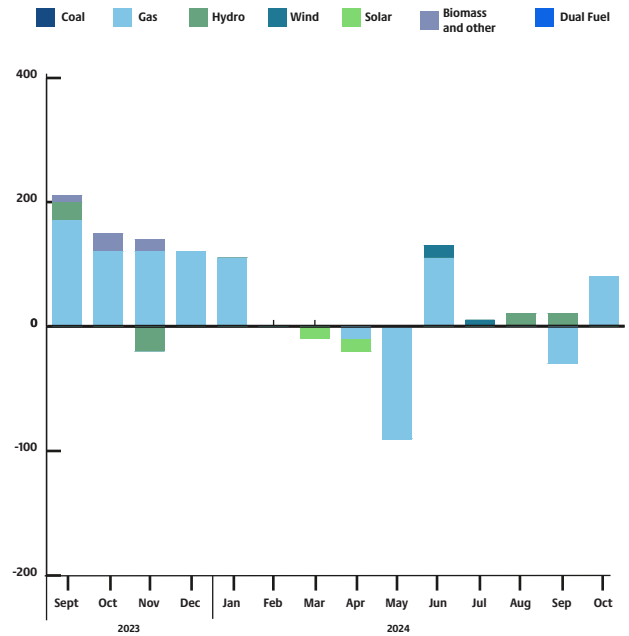
AESO monthly outages (as of August 2023)



AESO monthly outages (as of July 2023)



Month-over-month change in outages (August 2023 over July 2023)

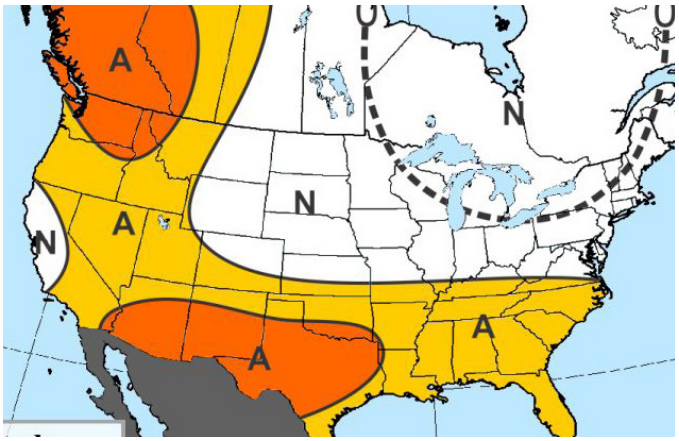


MAXAR'S 30–60 DAY OUTLOOK

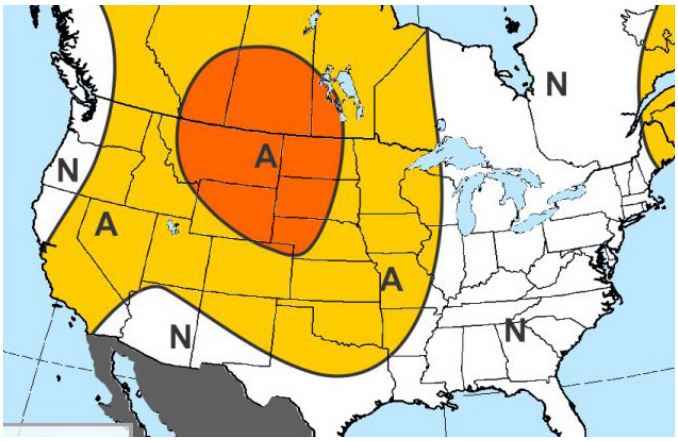
Maxar's final outlook for August undergoes a mix of changes, trending cooler in the East as well as in the Rockies and Northern California while hotter trends are noted from the Southeast to Southwest and Northwest. These changes balance out to maintain the PWCDD (Population-Weighted Cooling Degree Days) forecast at 345, which when added to Jun-Jul would make for a summer total of 967 PWCDDs. This falls between the 10-year (988) and 30-year (927) normals and is coolest since 2017 (935). The MJO (Madden-Julian Oscillation) looks to be a standing wave over the Pacific for much of the next few weeks, favoring somewhat of a persistence pattern from July. That said, uncertainty surrounding the Atlantic/West Pacific tropics limits confidence.

September remains unchanged with aboves across the West and Central while near normal in the South and East. The forecast is based on correlations to +AMO (Atlantic Multidecadal Oscillation) and –PDO (Pacific Decadal Oscillation), with El Niño carrying little directional correlation in September. A composite of the 20 most recent CFS (Climate Forecast System) model runs features a broader coverage of aboves across most of the US aside from California and the coastal Northeast. Uncertainty in the Atlantic and West Pacific tropics maintains lower confidence. A composite of five moderate El Niños in September averages cooler at 173 PWCDDs, with the hottest (2002) matching our forecast of 205 while the other four were cooler than the 30-year normal.

August 2023



September 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