

# TransCanada Power Market Update

January 2018

## Forward Prices Table

	Flat 7x24 (\$/MWh)	AB - 6x16 On Peak (\$/MWh)	AB - Off-Peak (\$/MWh)	AECO Gas (\$/GJ)	Heat Rate
<b>BOM</b>	\$42.00	\$49.56	\$32.76	\$1.78	23.6
<b>February</b>	\$39.75	\$46.51	\$31.01	\$1.69	23.5
<b>2018</b>	\$55.60	\$71.17	\$38.92	\$1.29	43.1
<b>2019</b>	\$55.00	\$71.50	\$38.50	\$1.51	36.4
<b>2020</b>	\$47.50	\$61.75	\$33.25	\$1.65	28.8

*All prices are indicative as of indicative of January 9th, 2018. For Firm power price quotes please contact TransCanada's Power Marketing team. See contacts on the last page.*

## Alberta Market Recap – December 2017

Happy New Year!

December 2017 electricity prices settled at \$21.99/MWh ranging from a minimum hourly spot price of \$13.48/MWh and a maximum hourly spot price of \$49.62/MWh. Even with the bitter cold temperatures that hit the province during the holidays, prices stayed in the mid \$20.00/MWh range. However, although pricing stayed low throughout each of the extreme cold warnings, Albertans did set a new record in power consumption on Thursday December 28th, 2017 between 5:00 p.m. and 6:00 p.m.. During this hour, Alberta used 11,473 MW of electricity which surpassed the province's previous Alberta Internal Load (AIL) record of 11,458 MW from December 16, 2016.

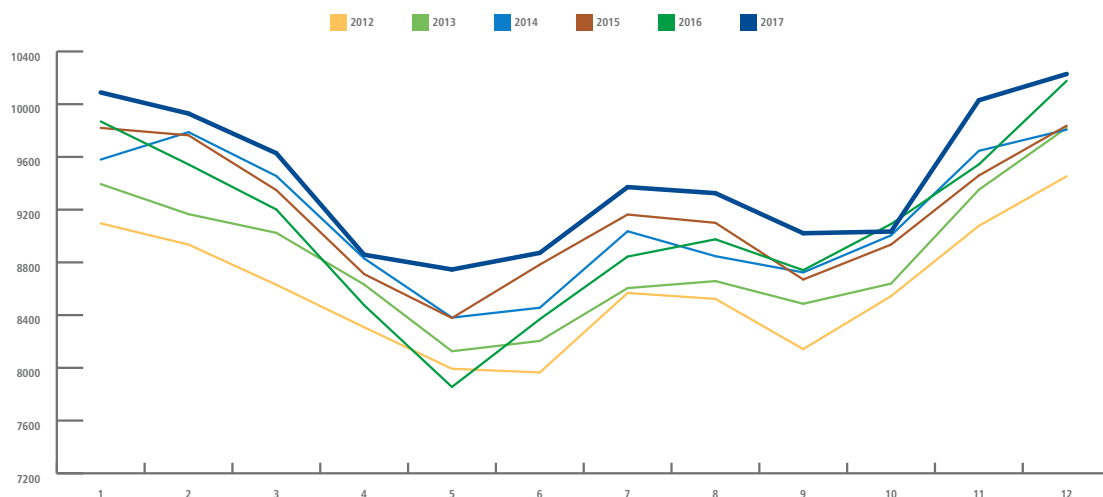
Overall, 2017 was a stronger year than 2016 as we saw increased spot prices and increased demand. The Alberta pool price ended up settling at \$22.19/MWh for the year, which was a 20% increase from the average 2016 settle of \$18.28/MWh. Although we have seen a fair increase in pool prices from 2016, these prices are still half of the prices we saw in Alberta prior to the economic downturn. In addition to increased pricing, AIL also increased when compared to 2016. In fact, in 2017, AIL averaged 9,426 MW which was approximately a 4% increase from the previous year's average AIL of 9,057 MW. As seen in the graphs below, when compared to 2016's AIL demand, Alberta saw a 4.2% increase in the total average 2017 AIL, however when temperature adjusted, AIL increased on average by 3.7%.

<sup>1</sup>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 TransCanada'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. TransCanada undertakes no obligation to update or revise any forward-looking information except as required by law.

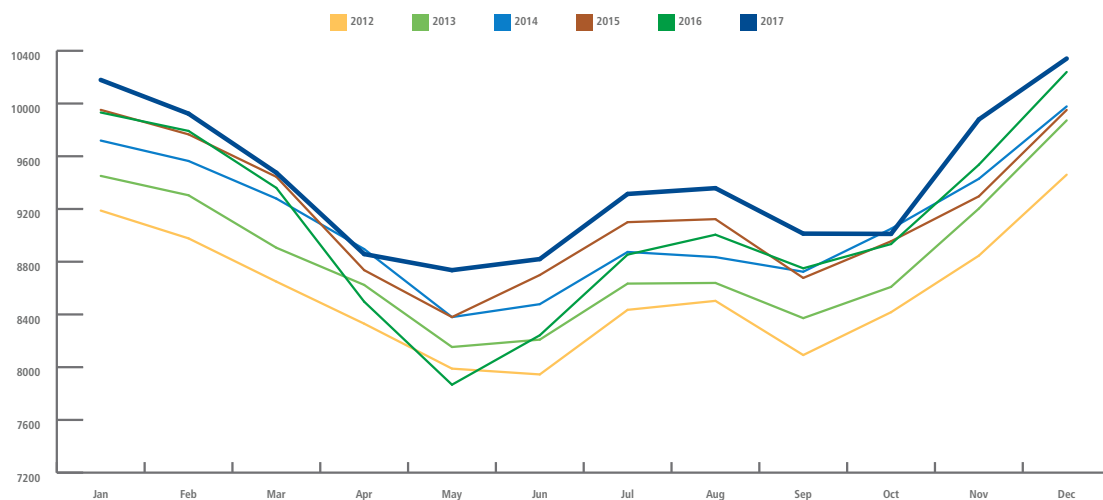
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Alberta Internal Load



AIL - Temp Adjusted



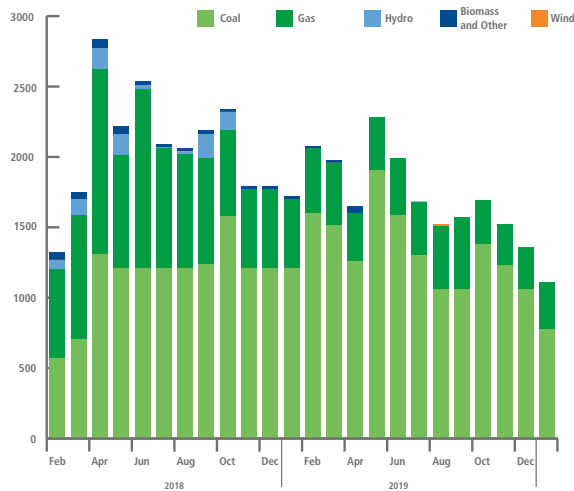
From December 25th, 2017 until December 31st, 2017, Calgary experienced rigid temperatures ranging from actual highs of -17 degrees Celsius to -25 degrees Celsius. Most notably, on December 30th, 2017 and December 31st, 2017, Calgary reached exactly -25.2 degrees Celsius which was Calgary's coldest day since March 1st, 2013. Edmonton also experienced very similar below normal temperatures during the week.

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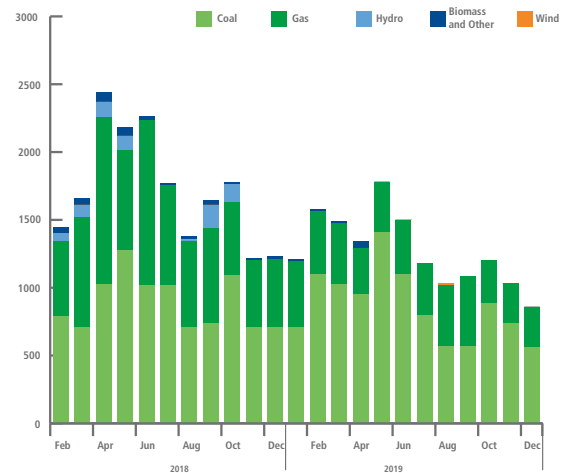
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## Monthly Outages

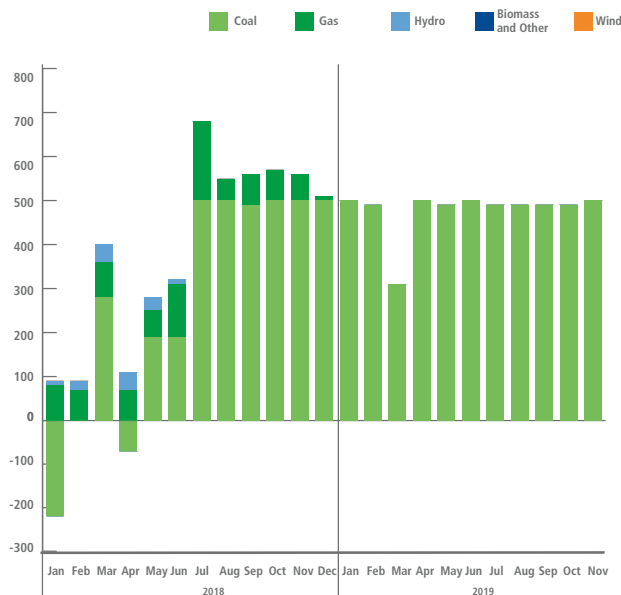
AESO Monthly Outages (as of January 8, 2018)



AESO Monthly Outages (as of December 1, 2017)



Month-over-Month Change in Outages  
(January 2018 over December 2017)



Going forward into 2018 and 2019, the Alberta electricity market can expect to see the following changes in coal unit outages:

- As of January 1, 2018: Sundance Unit 1 became retired
- As of January 1, 2018: Sundance Unit 2 mothballed for a period of up to 2-years
- As of April 1, 2018: Sundance Units 3 and 5 will be temporarily mothballed for a period of up to two years
- As of April 1, 2019: Sundance Unit 4, will be temporarily mothballed for a period of up to two years.

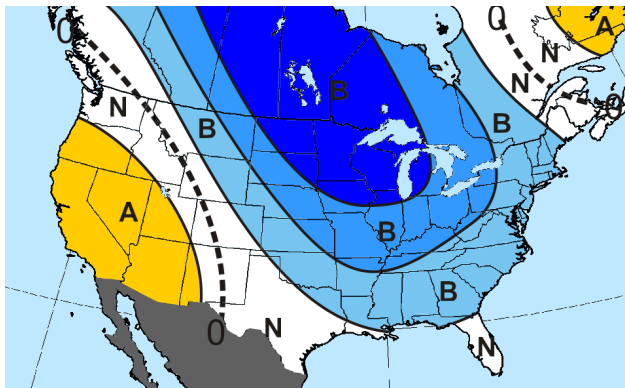
Gas generation changes were quite minimal from last month's report. The largest variance in gas will take place in August 2018 when an additional 180 MW of gas is added to the outage mix.

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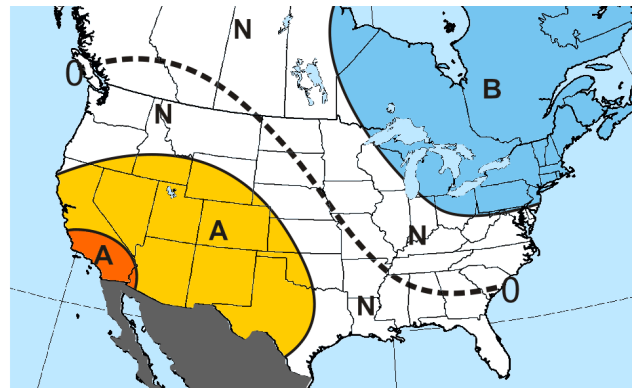
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## MDA Weather Services 30-60 Day Outlook

February 2018



March 2018



The month of January started off chilly and is expected to be a historically cold month according to MDA Weather Services, with cooler than normal temperatures for most of the month. As we look further ahead into February and March, we will continue to see below normal temperatures. In particular, the Canadian Prairie provinces will see -1.0 to -4.9 anomalies during February. Once February's cold spell is complete, March looks like it'll warm up slightly with temperatures closer to the near-normal or slightly below normal range.

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## In Other News

### Alberta Power Market 2017 Summary Statistics

		2016	2017	2016 vs. 2017
Average AB Power Pool Price	(C\$/MWh)	\$18.28	\$ 22.19	21.39%
Average AECO Gas Price	(C\$/GJ)	2.05	2.08	1.46%
AIL Energy Demand	(GWh)	79,560	82,572	3.79%
AIL Peak Demand	(MW)	11,458	11,473	0.13%

Month	Average of Price (\$)	Average of AIL Demand (MW)
Jan	\$ 23.96	10,089
Feb	\$ 22.18	9,929
Mar	\$ 21.01	9,628
Apr	\$ 19.10	8,858
May	\$ 21.90	8,746
Jun	\$ 16.78	8,872
Jul	\$ 26.96	9,371
Aug	\$ 24.57	9,325
Sep	\$ 22.11	9,021
Oct	\$ 20.45	9,034
Nov	\$ 25.03	10,030
Dec	\$ 21.99	10,229

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## Renewable Electricity Program (REP) Round 1 Announcement

The winners of the Renewable Electricity Program (REP) Round 1 were announced on December 13, 2017.

There were 12 participants that submitted bids for a total of 26 projects and three successful bidders that will add close to 600 MW of wind generation to the province each with 20-year Contract for Differences (CFDs). The winners are as follows:

- Capital Power: 201 MW Whitla Wind project 60 kilometres southwest of Medicine Hat.
- EDP Renewables Canada Ltd.: 248 MW wind farm at their Sharp Hills project east of Hanna, roughly 50 kilometres north of Oyen.
- Enel Green Power North America, Inc.: a) 115-megawatt Riverview Wind Farm and b) 31-megawatt Phase 2 of Castle Rock Ridge Wind Power Plant just outside of Pincher Creek.

Winning bids ranged between \$31.00/MWh and \$43.00/MWh, with the weighted-average price being \$37.00/MWh. This successful price is the lowest ever recorded price in Canada, with the next lowest price being \$85.00/MWh from Ontario's 2016 renewable procurement.

The official results can be found [here](#).

## Carbon Competitiveness Incentive Regulation (CCIR)

On December 18, 2017, the Carbon Competitiveness Incentive Regulation (CCIR) was officially released by the Government of Alberta. This regulation replaces the Specified Gas Emitters Regulation (SGRER) starting January 1, 2018 and applies to facilities that emitted 100,000 tonnes or more of greenhouse gases (GHGs) in 2003 and beyond. The updated documents (below) outline the new standards for regulated facilities and the new standards for the province's emissions offset system.

The standards for regulated facilities and the annual forecasting form for facilities meeting or exceeding 1 megatonne of emissions are posted on the CCI website: <https://www.alberta.ca/carbon-competitiveness-incentive-regulation.aspx>

The standards for the emissions offset system are posted on the program website under the heading "Standards": <http://aep.alberta.ca/climate-change/guidelines-legislation/specified-gas-emitters-regulation/offset-credit-system-protocols.aspx>

## TransCanada Announces Agreement to sell U.S. Retail Contracts

TransCanada Corporation announced that it entered into an agreement to sell its outstanding U.S. retail power contracts to EDF Energy Services, LLC. The December 27, 2017 announcement can be found [here](#).

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