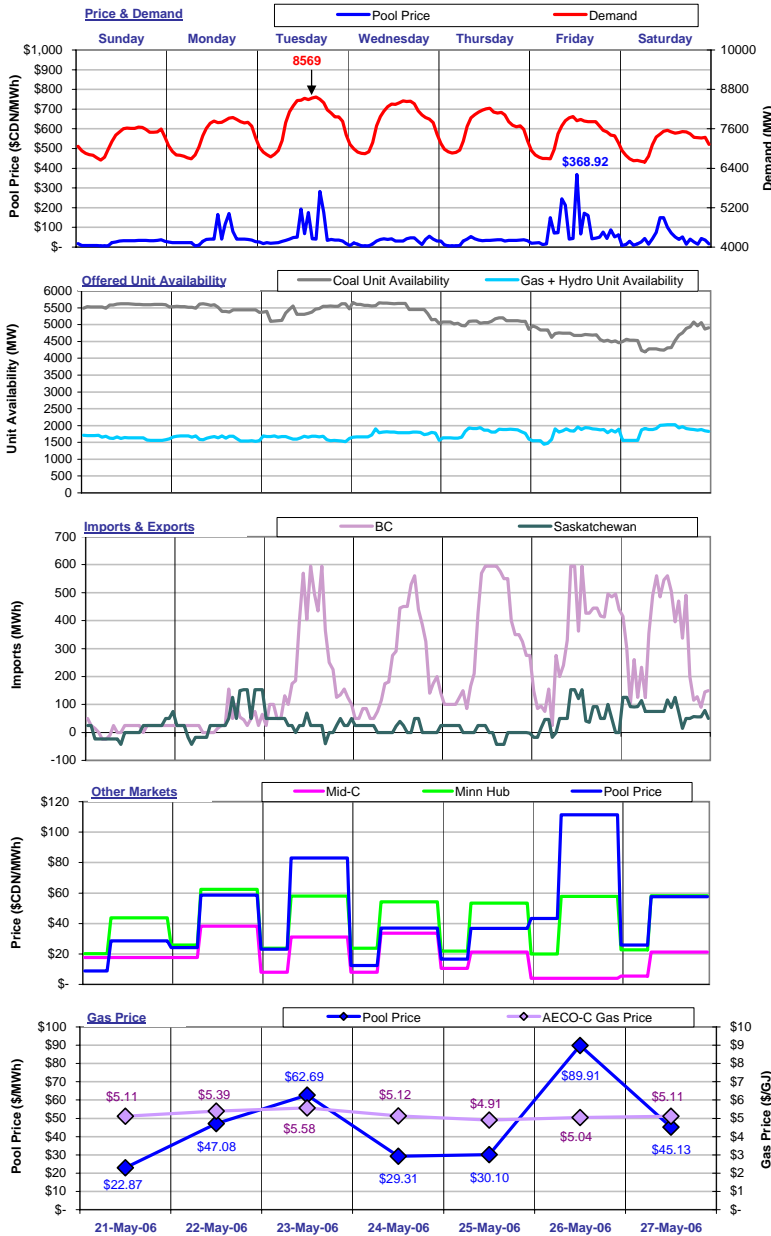


# The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending May 27, 2006

## Weekly Highlights



For the week ending May 27, 2006, **Pool Price** averaged \$46.73/MWh and ranged from a minimum of \$6.70/MWh in HE08 on Sunday to a maximum of \$368/MWh in HE13 on Friday. **Demand** reached a high of 8569 MW in HE16 on Tuesday and a low of 6589 MW in HE07 on Saturday. Average demand for the week was 7505 MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.14.

**Coal Unit Availability** averaged 5186 MW last week. This is an equivalent availability of 89% (based on MCR). **Gas and Hydro Unit Availability** averaged 1726MW last week, which is an equivalent of 30% (based on MCR).

Availability numbers are based on MW offered into the energy merit order.

Alberta was a net importer from **BC** last week with total imports equal to 36,872MWh. Alberta was a net importer from Saskatchewan last week with total imports equal to 5,765MWh. Overall, Alberta imported 42,637MWh of electricity last week.

**Pool Prices** were generally higher than prices in **Mid-C** and higher than prices in **Minn Hub** last week. **Mid-C** prices averaged \$24.95/MWh on-peak and \$10.19/MWh off-peak. **Minn Hub** prices averaged \$57.31/MWh on-peak and \$22.54/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.11846.

The average **AECO-C Gas Price** last week was \$5.18/GJ and ranged from a minimum of \$4.91/GJ to \$5.58/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 4.48 GJ/MWh to a high of 17.84GJ/MWh. The average market heat rate for the week was 9.00 GJ/MWh.

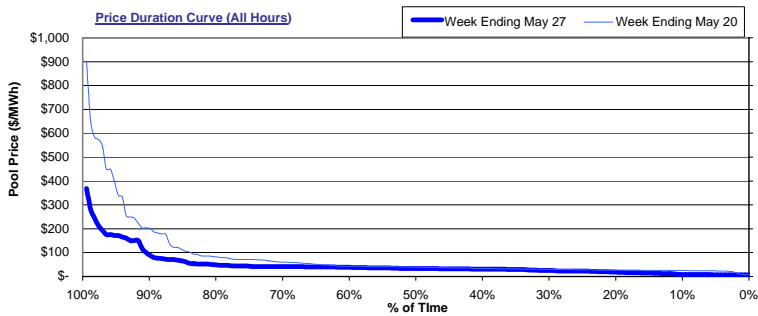


Alberta's Market Surveillance Administrator is in place to monitor the fair, efficient and openly competitive operation of all electricity markets within the province. The Market Monitor is a weekly publication by the MSA intended to educate industry participants and the public on market activities for the [previous](#) week. Any questions regarding the material in this publication should be directed to MSA staff. Our contact information is available on the MSA website: [www.albertamsa.ca](http://www.albertamsa.ca)

# Wholesale Market

## Weekly Market Statistics

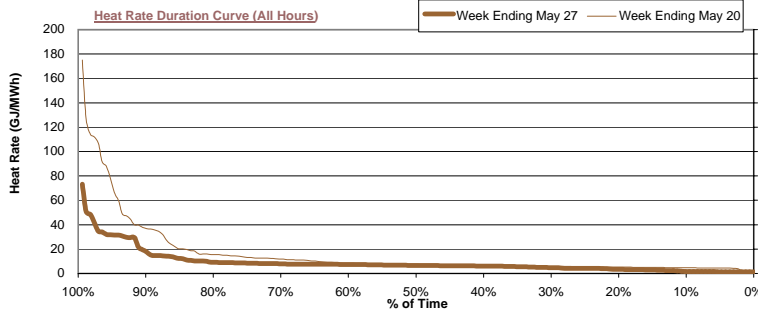
|  | Sunday<br>21-May | Monday<br>22-May | Tuesday<br>23-May | Wednesday<br>24-May | Thursday<br>25-May | Friday<br>26-May | Saturday<br>27-May | Average  | Last<br>Week | % Change | YTD      |
|--|------------------|------------------|-------------------|---------------------|--------------------|------------------|--------------------|----------|--------------|----------|----------|
| <b>Pool Price</b>                      |                  |                  |                   |                     |                    |                  |                    |          |              |          |          |
| Average                                | \$ 22.87         | \$ 47.08         | \$ 62.69          | \$ 29.31            | \$ 30.10           | \$ 89.91         | \$ 45.13           | \$ 46.73 | \$ 82.82     | -43.6%   | \$ 53.11 |
| On-Peak                                | NA               | \$ 58.68         | \$ 83.01          | \$ 37.02            | \$ 36.73           | \$ 111.42        | \$ 57.59           | \$ 64.07 | \$ 123.11    | -48.0%   | \$ 67.34 |
| Off-Peak                               | \$ 22.87         | \$ 23.88         | \$ 22.05          | \$ 13.88            | \$ 16.85           | \$ 46.90         | \$ 20.20           | \$ 23.60 | \$ 29.10     | -18.9%   | \$ 32.33 |
| COV                                    | 0.52             | 0.92             | 1.10              | 0.49                | 0.42               | 0.97             | 0.88               | 0.76     | 0.79         | -4.0%    |          |
| <b>Heat Rate</b>                       |                  |                  |                   |                     |                    |                  |                    |          |              |          |          |
| Average                                | 4.48             | 8.73             | 11.24             | 5.72                | 6.14               | 17.84            | 8.83               | 9.00     | 15.86        | -43.3%   | 8.02     |
| On-Peak                                | NA               | 10.88            | 14.88             | 7.22                | 7.49               | 22.11            | 11.27              | 12.31    | 23.53        | -47.7%   | 10.18    |
| Off-Peak                               | 4.48             | 4.43             | 3.95              | 2.71                | 3.43               | 9.31             | 3.95               | 4.58     | 5.63         | -18.7%   | 4.88     |
| <b>Demand</b>                          |                  |                  |                   |                     |                    |                  |                    |          |              |          |          |
| Average                                | 7,269            | 7,411            | 7,837             | 7,787               | 7,640              | 7,424            | 7,168              | 7,505    | 7,652        | -1.9%    | 7,877    |
| Minimum                                | 6,653            | 6,692            | 6,750             | 6,843               | 6,866              | 6,684            | 6,589              | 6,725    | 6,737        | -0.2%    | 6,351    |
| Maximum                                | 7,656            | 7,949            | 8,569             | 8,447               | 8,228              | 7,970            | 7,551              | 8,053    | 8,304        | -3.0%    | 9,306    |
| <b>Coal Unit Availability</b>          |                  |                  |                   |                     |                    |                  |                    |          |              |          |          |
| Average                                | 5,572            | 5,489            | 5,397             | 5,503               | 5,078              | 4,693            | 4,571              | 5,186    | 5,354        |          | 5,546    |
| Utilization                            | 95%              | 94%              | 92%               | 94%                 | 87%                | 80%              | 78%                | 89%      | 92%          | -2.9%    | 95%      |
| <b>Gas and Hydro Unit Availability</b> |                  |                  |                   |                     |                    |                  |                    |          |              |          |          |
| Average                                | 1,634            | 1,628            | 1,632             | 1,756               | 1,799              | 1,787            | 1,849              | 1,726    | 1,846        |          | 1,960    |
| Utilization                            | 34%              | 34%              | 34%               | 37%                 | 38%                | 38%              | 39%                | 30%      | 33%          | -2.1%    | 35%      |



The price duration curves show the % of time that prices were at or below a certain value during the week.

For the week ending **May 27**, prices were at or below:

|           |                  |
|-----------|------------------|
| \$20/MWh  | 21% of the time  |
| \$50/MWh  | 80% of the time  |
| \$100/MWh | 90% of the time  |
| \$250/MWh | 98% of the time  |
| \$500/MWh | 100% of the time |



The heat rate duration curves show the % of time that the implied market heat rate was at or below a certain value during the week. For the week ending **May 27** implied market heat rates were at or below:

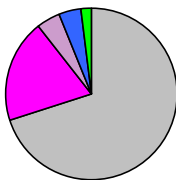
|             |                 |
|-------------|-----------------|
| 5.0 GJ/MWh  | 31% of the time |
| 10.0 GJ/MWh | 82% of the time |
| 15.0 GJ/MWh | 89% of the time |
| 20.0 GJ/MWh | 91% of the time |

### Market Share Statistics

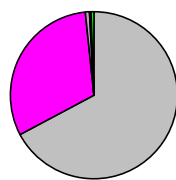
By Fuel Type:

Legend: Coal (Grey), Gas - Cogen (Pink), Gas - Other (Light Blue), Hydro (Dark Blue), Other (Green)

Weekly Generation by Fuel Type

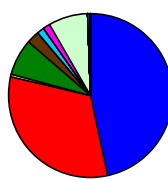


Weekly Price Setting by Fuel Type



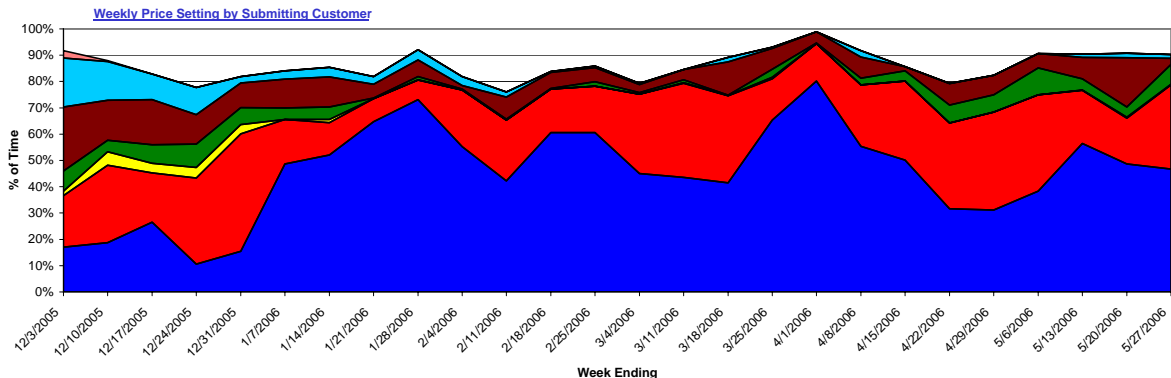
By Submitting Customer:

Weekly Price Setting by Submitting Customer

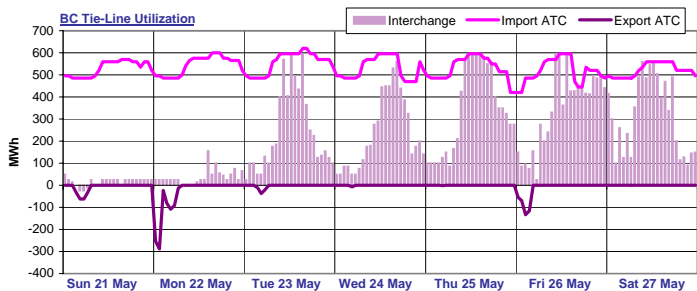


Last week, coal units were responsible for 69.9% of the generation in the province and set price 67.1% of the time. Gas-cogen units accounted for 19.6% of the generation and set price 31.3% of the time last week while other gas units made up 4.5% of generation and set price 0.7% of the time.

A total of 10 market participants set price last week. Two market participants set price more than 20% of the time last week. The top price setter set price 46.7% of the time and the top five price setters set price a total of 96.3% of the time.

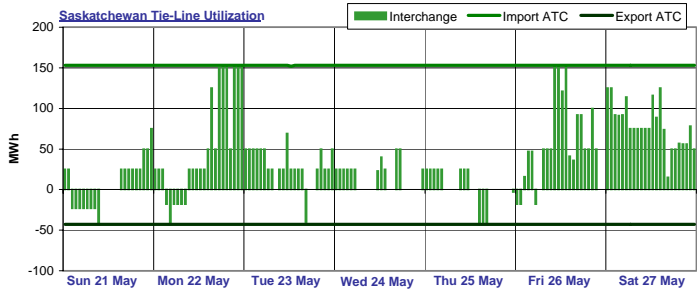


# Interties

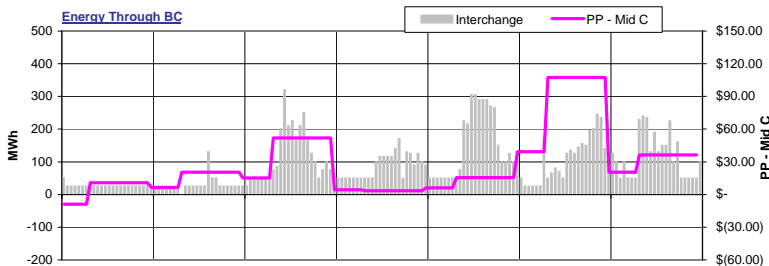


BC import capacity was 41% utilized last week while BC export capacity was 6% utilized. Energy was being imported into Alberta over the BC tie-line 93% of the time and exported out of Alberta over the BC tie-line 2% of the time last week. There was no activity on the BC tie-line 5% of the time last week.

Note: External reserve contract volumes have been subtracted from the BC import ATC as this capacity is not available to import energy into Alberta.



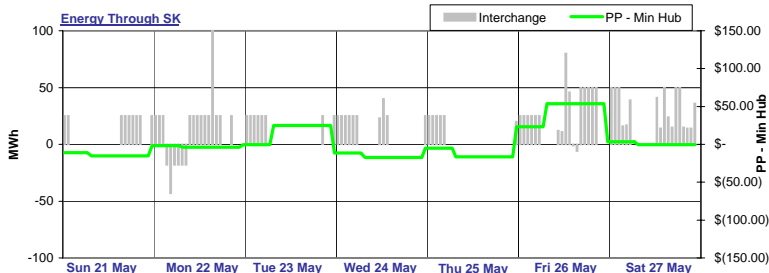
Saskatchewan import capacity was 25% utilized last week while Saskatchewan export capacity was 8% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 66% of the time and exported out of Alberta over the Saskatchewan tie-line 13% of the time last week. There was no activity on the Saskatchewan tie-line 21% of the time last week.



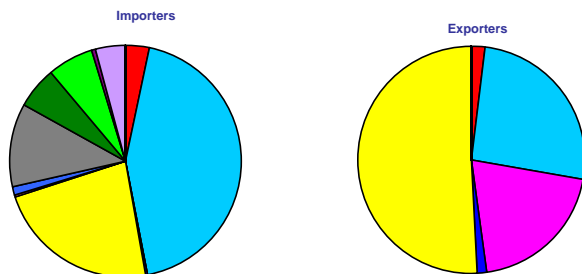
Last week, Alberta spot prices were mostly higher relative to prices in the Pacific Northwest as represented by Mid-C index prices, supporting import activity across the Alberta - BC interconnection.

Alberta prices were generally higher than prices in MAPP as represented by spot prices at the Minnesota Hub, which generally supported import activity across the Alberta - Saskatchewan interconnection.

Note: Platt's day-ahead strip prices used in energy through BC and SK graphs.



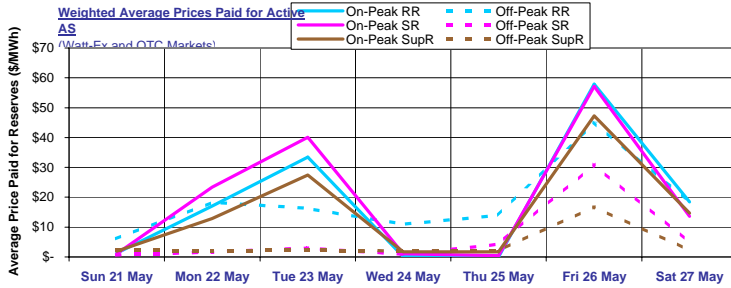
Tie-Line Market Shares



Last week, there were a total of 12 importers. The most active importer had a market share of 43.5% while the second most active importer had a market share of 22.8%. There were a total of 5 exporters last week. The most active exporter had a market share of 50.7% while the next largest exporter had a market share of 25.8%.

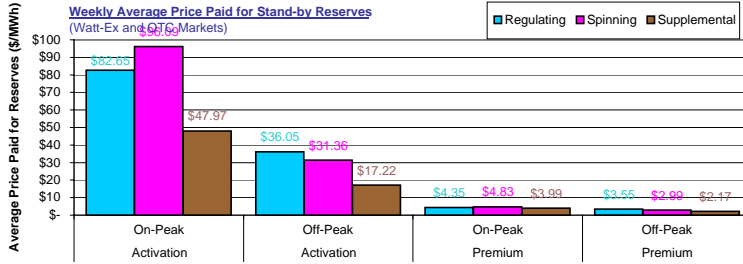
Note: Market shares are based on the combined activity on both interties.

# Ancillary Services Market



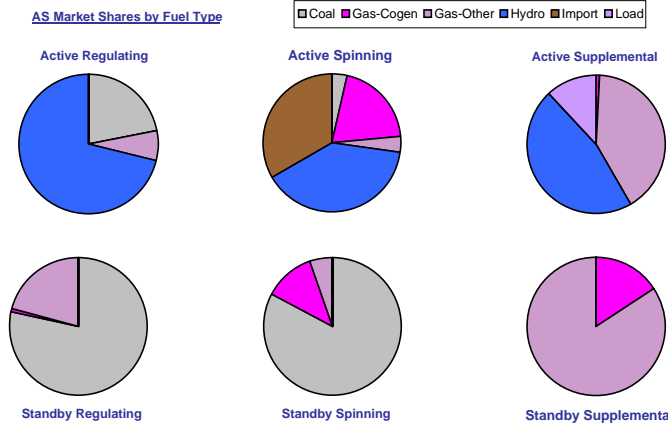
Average on-peak prices paid for active ancillary services last week were **\$18.11/MWh**, **\$19.71/MWh** and **\$15.42/MWh** respectively for active **regulating**, **spinning** and **supplemental** reserves.

Active average off-peak prices were somewhat **higher** and averaged **\$18.29/MWh**, **\$6.60/MWh** and **\$4.24/MWh** for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from **\$17.22/MWh** for **off-peak supplemental** reserves to **\$96.09/MWh** for **on-peak spinning** reserves.

Weekly average premium prices ranged from **\$2.17/MWh** for **off-peak supplemental** reserves up to **\$4.83/MWh** for **on-peak spinning** reserves.



Last week **hydro** units had the largest market share in the **active regulating** reserve market with **71.0%**. In the **active spinning** reserve market, **hydro** units had the leading market share with **39.6%** while in the **active supplemental** reserve market, **hydro** units dominated with a **46.5%** market share.

Coal units dominated the **standby regulating** reserve market with a **78.4%** market share. Leading market share in the **standby spinning** market was held by coal units with a **82.7%** market share. In the **standby supplemental** reserve market, gas units had the leading market share with **84.3%**.

## Glossary

- HE** Hour Ending
- On-Peak Hours** In Alberta: HE08 through HE23, Monday through Saturday (prevailing Mountain time)  
In Mid-C: HE07 through HE22, Monday through Saturday (prevailing Pacific time)  
In Minn Hub: HE08 through HE23, Monday through Sunday (prevailing Central time)
- Off-Peak Hours** In Alberta: HE01 through HE07 + HE24 (of the same day), Monday through Saturday + HE01 through HE24 Sundays + holidays (prevailing Mountain time)  
In Mid-C: HE24 (of the previous day) through HE07 (of the day in question), Monday through Saturday + HE01 through HE24 Sundays + holidays (prevailing Pacific time)  
In Minn Hub: HE24 (of the previous day) through HE07 (of the day in question), Monday through Sunday (prevailing Central time)
- COV** Coefficient of Variation  
The standard deviation of a series of numbers divided by the mean of the same series of numbers. Used as a measure of volatility.
- ATC** Available Transfer Capacity  
A measure of the maximum energy flow possible in one direction across an intertie.
- Market Heat Rate** The prevailing Pool price divided by the prevailing gas price.
- Sparksread** Sparksreads give an indication of the revenue available to cover costs after fuel costs have been paid. A positive spread indicates it is more economical to buy gas and generate electricity while a negative spread indicates it is more economical to buy electricity from the grid.