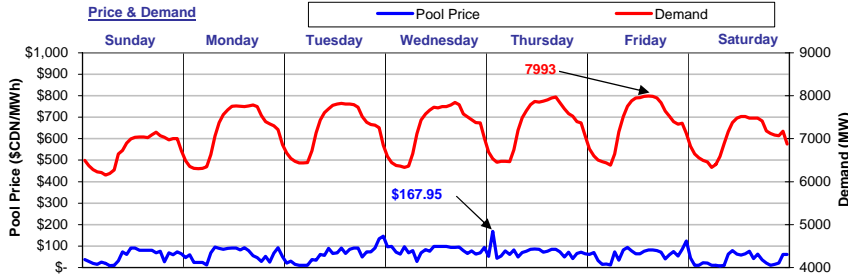


# The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending June 5, 2004

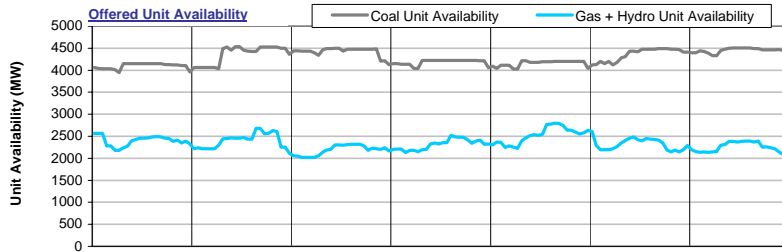
## Weekly Highlights



For the week ending June 5, 2004, **Pool Price** averaged \$61.51/MWh and ranged from a minimum of \$7.66/MWh in HE08 on Saturday to a maximum of \$167.95/MWh in HE2 on Thursday.

**Demand** reached a high of 7993 MW in HE15 on Friday and a low of 6151 MW in HE06 on Sunday. Average demand for the week was 6989MW.

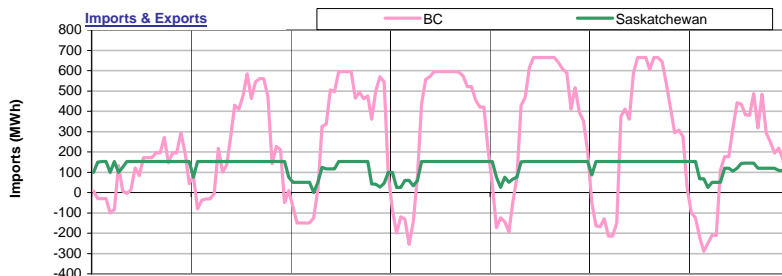
**Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.25.



**Coal Unit Availability** averaged 4289 MW last week. This is an equivalent availability of 78% (based on MCR).

**Gas and Hydro Unit Availability** averaged 2341MW last week, which is an equivalent of 42% (based on MCR).

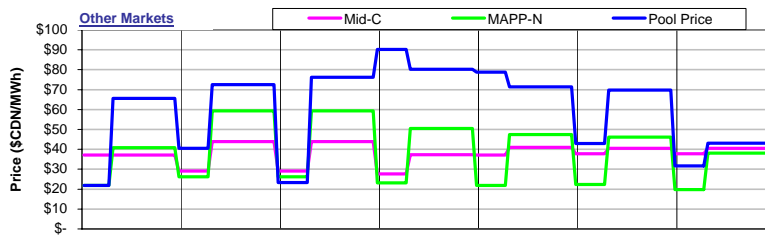
Availability numbers are based on MW offered into the energy merit order.



Alberta was a net importer from **BC** last week with total imports equal to 42,410MWh.

Alberta was a net importer from **Saskatchewan** last week with total imports equal to 21,461MWh.

Overall, Alberta imported 63,871MWh of electricity last week.

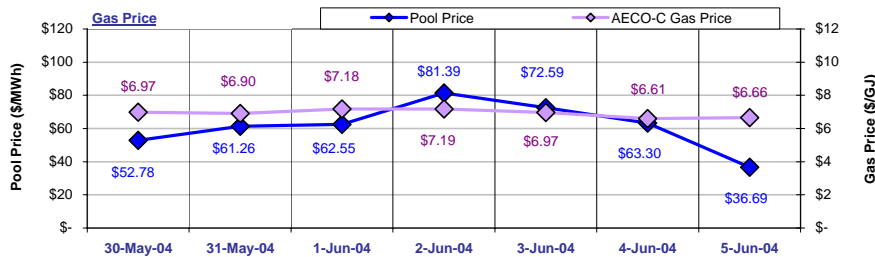


**Pool Prices** were generally higher than prices in **Mid-C** and higher than prices in **MAPP-N** last week.

**Mid-C** prices averaged \$41.23/MWh on-peak and \$33.66/MWh off-peak.

**MAPP-N** prices averaged \$50.11/MWh on-peak and \$23.06/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.363.



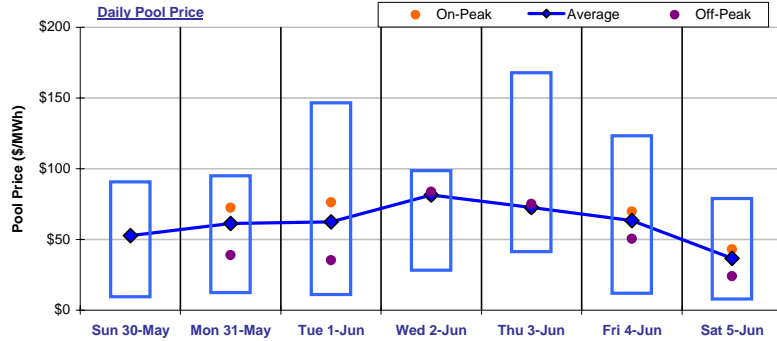
The average **AECO-C Gas Price** last week was \$6.93/GJ and ranged from a minimum of \$6.61/GJ to \$7.19/GJ.

Prevailing gas prices resulted in market heat rates ranging from a low of 5.51GJ/MWh to a high of 11.33GJ/MWh. The average market heat rate for the week was 8.85GJ/MWh.

# Wholesale Market

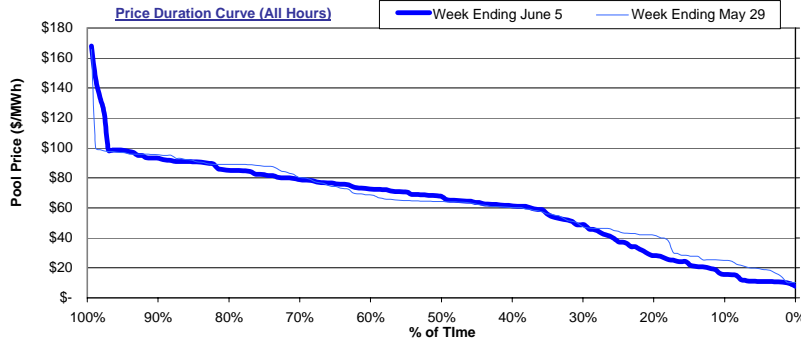
## Weekly Market Statistics

	Sunday 30-May	Monday 31-May	Tuesday 1-Jun	Wednesday 2-Jun	Thursday 3-Jun	Friday 4-Jun	Saturday 5-Jun	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 52.78	\$ 61.26	\$ 62.55	\$ 81.39	\$ 72.59	\$ 63.30	\$ 36.69	\$ <b>61.51</b>	\$ <b>62.74</b>	<b>-2.0%</b>	\$ <b>53.27</b>
On-Peak	NA	\$ 72.46	\$ 76.17	\$ 80.27	\$ 71.36	\$ 69.74	\$ 43.03	\$ <b>68.84</b>	\$ <b>73.73</b>	<b>-6.6%</b>	\$ <b>61.85</b>
Off-Peak	\$ 52.78	\$ 38.86	\$ 35.32	\$ 83.62	\$ 75.05	\$ 50.43	\$ 23.99	\$ <b>51.73</b>	\$ <b>48.08</b>	<b>7.6%</b>	\$ <b>38.26</b>
COV	0.53	0.45	0.59	0.22	0.34	0.42	0.67	<b>0.46</b>	<b>0.41</b>	<b>12.4%</b>	
<b>Demand</b>											
Average	6,735	7,183	7,241	7,232	7,327	7,340	7,026	<b>7,155</b>	<b>6,998</b>	<b>2.2%</b>	<b>7,380</b>
Minimum	6,151	6,305	6,437	6,330	6,455	6,386	6,333	<b>6,342</b>	<b>6,313</b>	<b>0.5%</b>	<b>6,094</b>
Maximum	7,152	7,789	7,825	7,842	7,972	7,993	7,520	<b>7,728</b>	<b>7,477</b>	<b>3.3%</b>	<b>8,967</b>
<b>Coal Unit Availability</b>											
Average	4,095	4,362	4,424	4,182	4,155	4,358	4,448	<b>4,289</b>	<b>4,360</b>		<b>5,021</b>
Utilization	74%	79%	80%	76%	75%	79%	81%	<b>78%</b>	<b>79%</b>	<b>-1.3%</b>	<b>91%</b>
<b>Gas and Hydro Unit Availability</b>											
Average	2,399	2,399	2,185	2,314	2,522	2,321	2,250	<b>2,341</b>	<b>2,492</b>		<b>2,227</b>
Utilization	50%	50%	46%	49%	53%	49%	47%	<b>41%</b>	<b>44%</b>	<b>-2.7%</b>	<b>39%</b>



The Daily Pool Price graph plots the daily range in hourly Pool price (defined by the blue box) along with the daily average and daily on and off-peak prices. The on-peak Pool price for the week was \$68.84/MWh while the off-peak Pool price for the week was \$51.73/MWh.

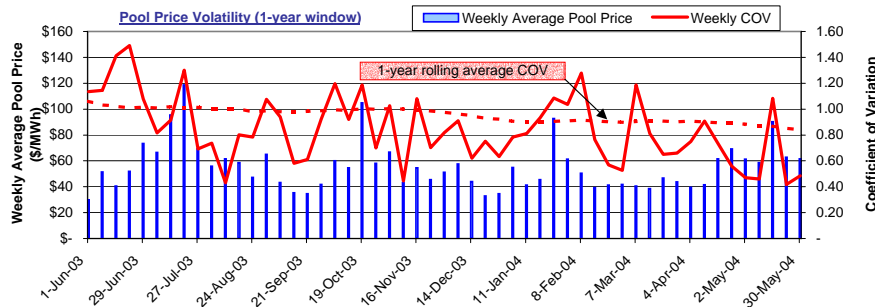
Note: Sundays and most statutory holidays are defined as off-peak.



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

For the week ending June 5, prices were at or below:

- \$20/MWh 12% of the time
- \$50/MWh 31% of the time
- \$100/MWh 97% of the time
- \$250/MWh 100% of the time
- \$500/MWh 100% of the time



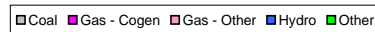
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility increased for the week ending June 5 from the previous week.

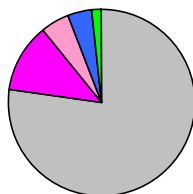
Pool price volatility also moved below the 1-year rolling average COV value.

### Market Share Statistics

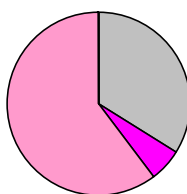
By Fuel Type:



Weekly Generation by Fuel Type

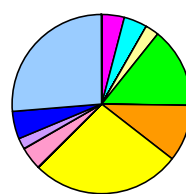


Weekly Price Setting by Fuel Type



By Submitting Customer:

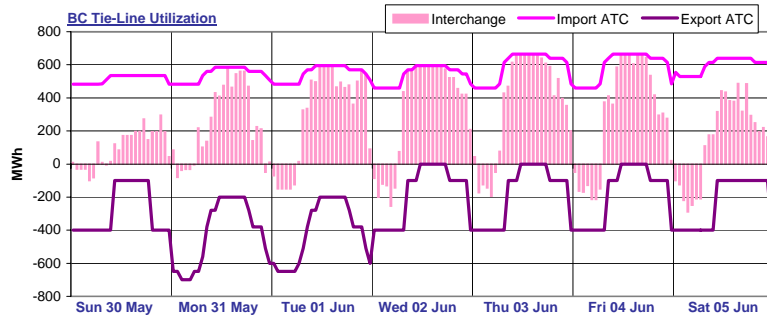
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 77.2% of the generation in the province and set price 33.9% of the time. Gas-cogen units accounted for 11.9% of the generation and set price 5.7% of the time last week while other gas units made up 5.2% of generation and set price 60.3% of the time.

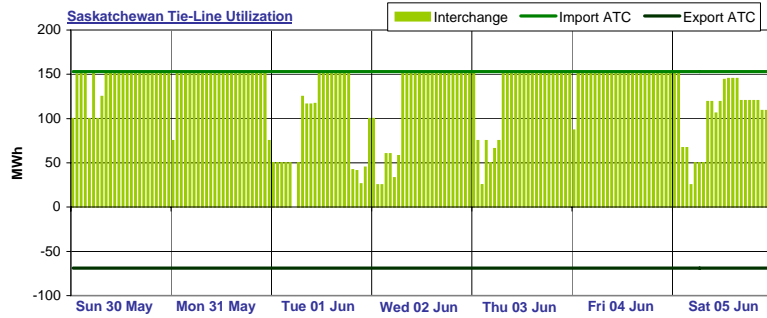
A total of 10 market participants set price last week. Two market participants set price more than 20% of the time last week. The top price setter set price 27.0% of the time and the top five price setters set price a total of 83.1% of the time.

# Interties



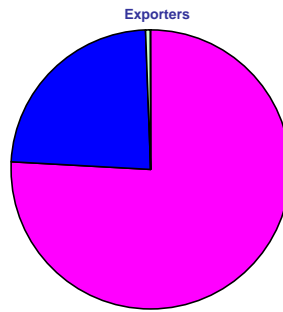
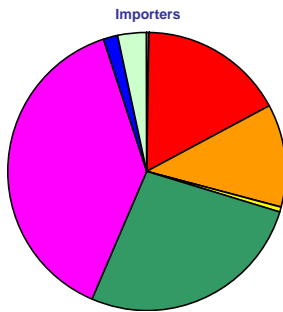
BC import capacity was 47% utilized last week while BC export capacity was 9% utilized. Energy was being imported into Alberta over the BC tie-line 74% of the time and exported out of Alberta over the BC tie-line 26% of the time last week. There was no activity on the BC tie-line 0% of the time last 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 83% utilized last week while Saskatchewan export capacity was 0% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 99% of the time and exported out of Alberta over the Saskatchewan tie-line 0% of the time last week. There was no activity on the Saskatchewan tie-line 1% of the time last week.

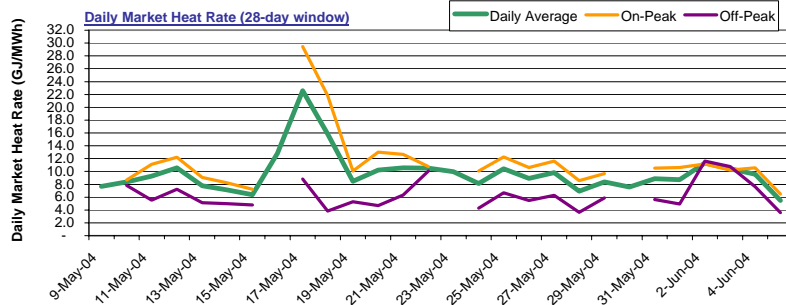
### Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 38.5% while the second most active importer had a market share of 26.7%. There were a total of 3 exporters last week. The most active exporter had a market share of 75.9% while the next largest exporter had a market share of 23.7%.

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

# Market Heat Rates



Over the past 28 days, the daily Market Heat Rate averaged 9.7 GJ/MWh and ranged from a low of 5.5 GJ/MWh to a high of 22.6 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 11.5 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.3 GJ/MWh.

### Sparksreads

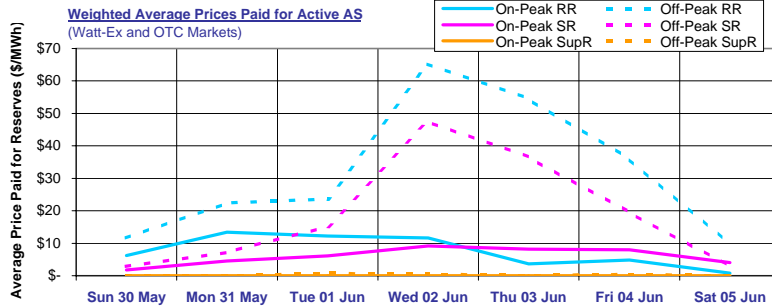
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak				
		Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5
Sun 30 May	\$ 6.97	\$ 52.78	0.47	(16.97)	NA	NA	NA	\$ 52.78	0.47	(16.97)		
Mon 31 May	\$ 6.90	\$ 61.26	9.47	(7.79)	\$ 72.46	20.67	3.41	\$ 38.86	(12.92)	(30.18)		
Tue 01 Jun	\$ 7.18	\$ 62.55	8.71	(9.24)	\$ 76.17	22.32	4.38	\$ 35.32	(18.52)	(36.47)		
Wed 02 Jun	\$ 7.19	\$ 81.39	27.49	9.52	\$ 80.27	26.38	8.41	\$ 83.62	29.72	11.75		
Thu 03 Jun	\$ 6.97	\$ 72.59	20.30	2.87	\$ 71.36	19.07	1.64	\$ 75.05	22.76	5.33		
Fri 04 Jun	\$ 6.61	\$ 63.30	13.76	(2.76)	\$ 69.74	20.20	3.68	\$ 50.43	0.88	(15.64)		
Sat 05 Jun	\$ 6.66	\$ 36.69	(13.28)	(29.94)	\$ 43.03	(6.94)	(23.59)	\$ 23.99	(25.98)	(42.63)		

Daily average sparksreads last week were mostly positive for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

On-peak sparksreads last week were mostly positive for a heat rate of 7.5 GJ/MWh and mostly positive for a heat rate of 10.0 GJ/MWh.

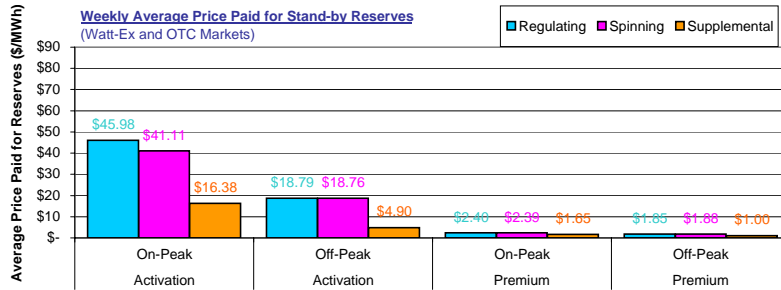
Off-peak sparksreads last week were mostly positive for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

# Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$7.56/MWh, \$6.03/MWh and \$0.00/MWh respectively for active **regulating**, **spinning** and **supplemental** reserves.

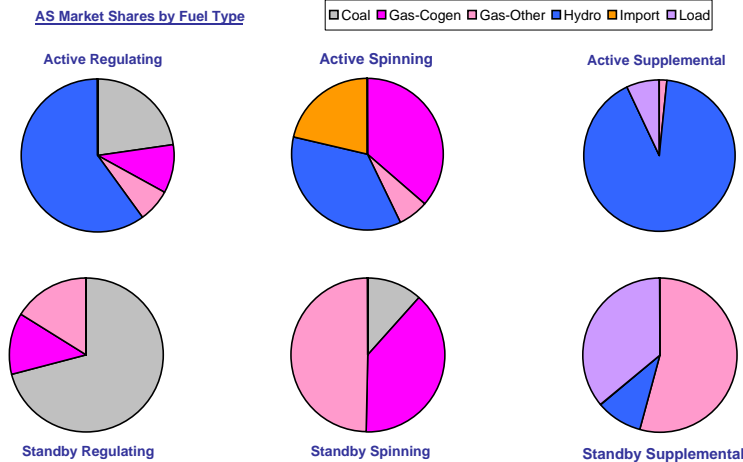
Active average off-peak prices were somewhat higher and averaged \$31.76/MWh, \$18.81/MWh and \$0.24/MWh for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.90/MWh for off-peak supplemental reserves to \$45.98/MWh for on-peak regulating reserves.

Weekly average premium prices ranged from \$1.00/MWh for off-peak supplemental reserves up to \$2.40/MWh for on-peak regulating reserves.

**AS Market Shares by Fuel Type**



Last week **hydro** units had the largest market share in the **active regulating** reserve market with 59.9%. In the **active spinning** reserve market, **hydro** units had the leading market share with 36.5% while in the **active supplemental** reserve market, **hydro** units dominated with a 91.3% market share.

Coal units dominated the **standby regulating** reserve market with a 71.0% market share. Leading market share in the **standby spinning** market was held by **gas-other** units with a 49.8% market share. In the **standby supplemental** reserve market, **gas-other** units had the leading market share with 54.1%.

## Glossary

<b>HE</b>	Hour Ending
<b>On-Peak Hours</b>	In Alberta: HE08 through HE23, Monday through Saturday (prevailing Mountain time) In Mid-C: HE07 through HE22, Monday through Saturday (prevailing Pacific time) In MAPP-N: HE08 through HE23, Monday through Sunday (prevailing Central time)
<b>Off-Peak Hours</b>	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 MAPP-N: HE24 (of the previous day) through HE07 (of the day in question), Monday through Sunday (prevailing Central time)
<b>COV</b>	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.
<b>ATC</b>	Available Transfer Capacity A measure of the maximum energy flow possible in one direction across an intertie.
<b>Market Heat Rate</b>	The prevailing Pool price divided by the prevailing gas price.
<b>Sparks spread</b>	Sparks spreads 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.