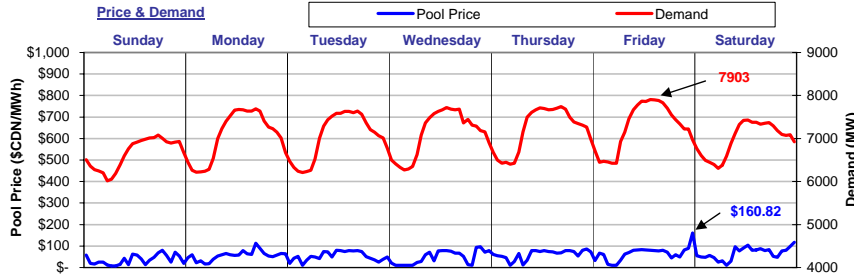


# The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending June 19, 2004

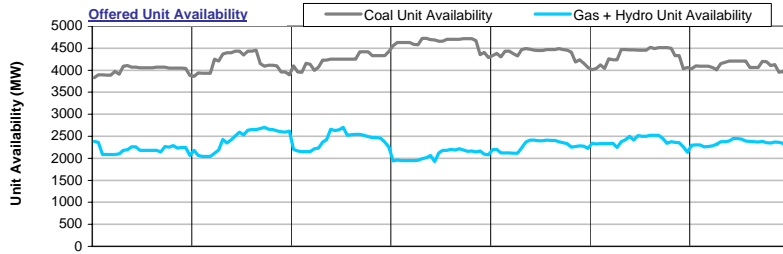
## Weekly Highlights



For the week ending June 19, 2004, **Pool Price** averaged \$55.41/MWh and ranged from a minimum of \$7.03/MWh in HE07 on Sunday to a maximum of \$160.82/MWh in HE24 on Friday.

**Demand** reached a high of 7903 MW in HE14 on Friday and a low of 6017 MW in HE06 on Sunday. Average demand for the week was 7055 MW.

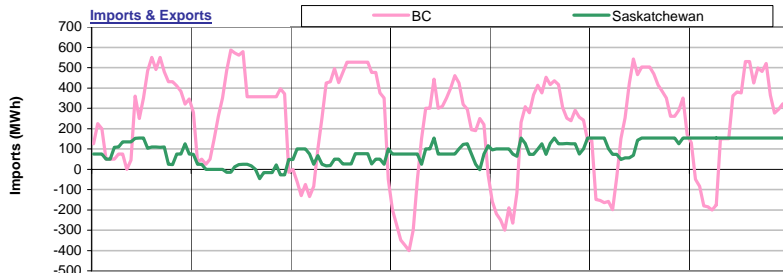
**Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.41.



**Coal Unit Availability** averaged 4266 MW last week. This is an equivalent availability of 77% (based on MCR).

**Gas and Hydro Unit Availability** averaged 2306MW last week, which is an equivalent of 41% (based on MCR).

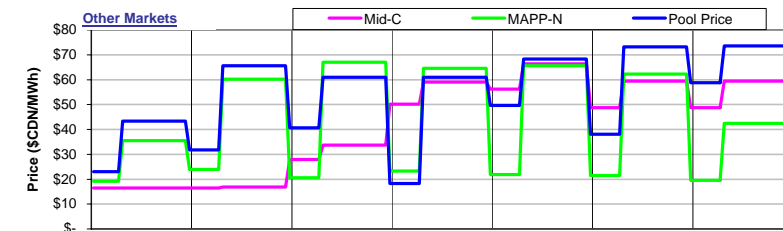
Availability numbers are based on MW offered into the energy merit order.



Alberta was a net importer from **BC** last week with total imports equal to 38,968MWh.

Alberta was a net importer from **Saskatchewan** last week with total imports equal to 14,969MWh.

Overall, Alberta imported 53,937MWh of electricity last week.

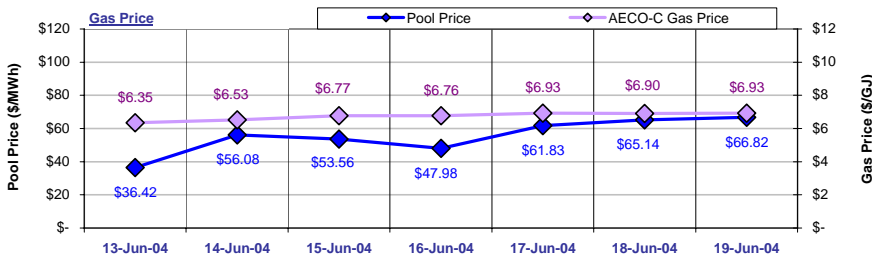


**Pool Prices** were generally higher than prices in **Mid-C** and higher than prices in **MAPP-N** last week.

**Mid-C** prices averaged \$49.11/MWh on-peak and \$37.80/MWh off-peak.

**MAPP-N** prices averaged \$60.34/MWh on-peak and \$21.39/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.3677.



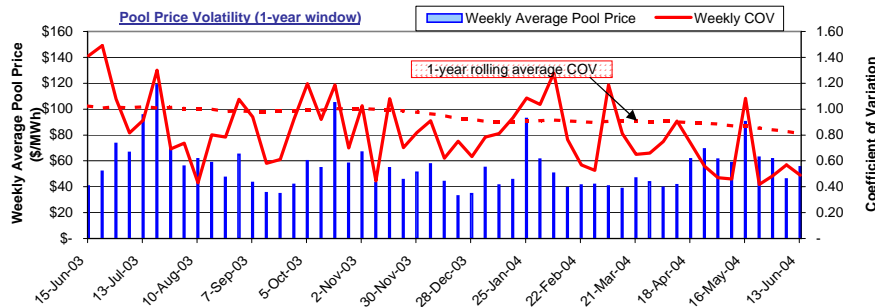
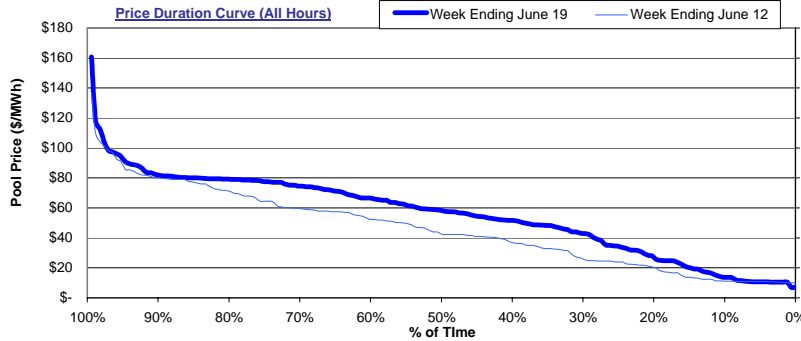
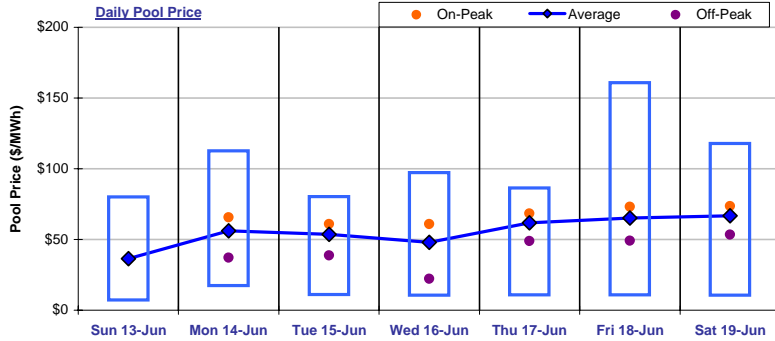
The average **AECO-C Gas Price** last week was \$6.74/GJ and ranged from a minimum of \$6.35/GJ to \$6.93/GJ.

Prevailing gas prices resulted in market heat rates ranging from a low of 5.74GJ/MWh to a high of 9.64 GJ/MWh. The average market heat rate for the week was 8.19 GJ/MWh.

# Wholesale Market

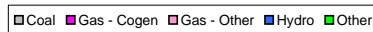
## Weekly Market Statistics

	Sunday 13-Jun	Monday 14-Jun	Tuesday 15-Jun	Wednesday 16-Jun	Thursday 17-Jun	Friday 18-Jun	Saturday 19-Jun	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 36.42	\$ 56.08	\$ 53.56	\$ 47.98	\$ 61.83	\$ 65.14	\$ 66.82	\$ 55.41	\$ 45.97	20.5%	\$ 53.24
On-Peak	NA	\$ 65.55	\$ 60.96	\$ 60.92	\$ 68.33	\$ 73.18	\$ 73.56	\$ 67.08	\$ 49.90	34.4%	\$ 61.58
Off-Peak	\$ 36.42	\$ 37.15	\$ 38.76	\$ 22.12	\$ 48.83	\$ 49.05	\$ 53.36	\$ 39.84	\$ 40.72	-2.2%	\$ 38.42
COV	0.62	0.38	0.39	0.65	0.35	0.49	0.41	0.47	0.55	-14.6%	
<b>Demand</b>											
Average	6,658	7,071	7,056	7,124	7,215	7,275	6,985	7,055	7,084	-0.4%	7,356
Minimum	6,017	6,220	6,212	6,273	6,404	6,425	6,306	6,265	6,324	-0.9%	6,017
Maximum	7,079	7,687	7,635	7,722	7,741	7,903	7,428	7,599	7,632	-0.4%	8,967
<b>Coal Unit Availability</b>											
Average	4,008	4,173	4,235	4,627	4,385	4,333	4,100	4,266	4,388	-2.2%	4,964
Utilization	73%	76%	77%	84%	79%	78%	74%	77%	79%	-2.2%	90%
<b>Gas and Hydro Unit Availability</b>											
Average	2,196	2,441	2,412	2,072	2,284	2,388	2,349	2,306	2,317	-0.2%	2,234
Utilization	46%	51%	51%	44%	48%	50%	49%	41%	41%	-0.2%	40%

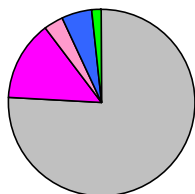


### Market Share Statistics

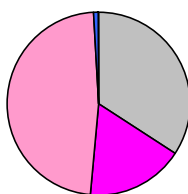
By Fuel Type:



Weekly Generation by Fuel Type



Weekly Price Setting by Fuel Type



By Submitting Customer:

Weekly Price Setting by Submitting Customer



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 \$67.08/MWh while the off-peak Pool price for the week was \$39.84/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 19, prices were at or below:

- \$20/MWh 15% of the time
- \$50/MWh 38% 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.

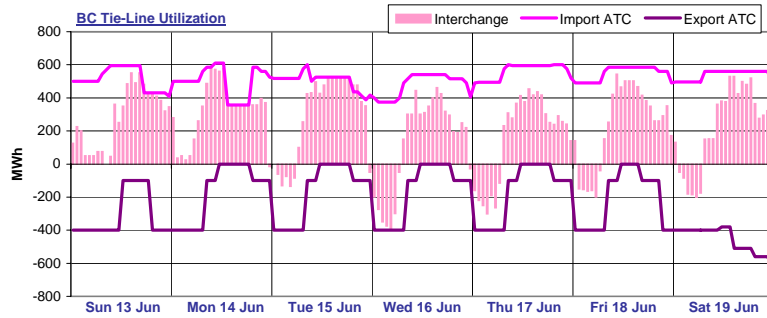
Pool price volatility decreased for the week ending June 19 from the previous week.

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

Last week, coal units were responsible for 75.9% of the generation in the province and set price 34.2% of the time. Gas-cogen units accounted for 13.9% of the generation and set price 17.3% of the time last week while other gas units made up 3.4% of generation and set price 47.7% of the time.

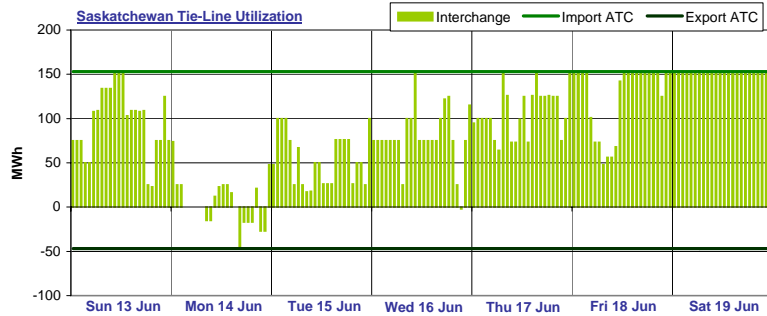
A total of 11 market participants set price last week. One market participant set price more than 20% of the time last week. The top price setter set price 34.9% of the time and the top five price setters set price a total of 76.5% of the time.

# Interties



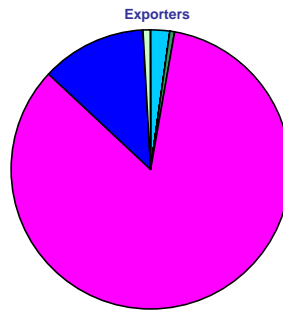
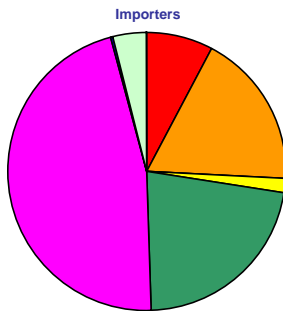
BC import capacity was 50% utilized last week while BC export capacity was 12% utilized. Energy was being imported into Alberta over the BC tie-line 79% of the time and exported out of Alberta over the BC tie-line 21% of the time last week. There was no activity on the BC tie-line 1% of the time last 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 59% utilized last week while Saskatchewan export capacity was 2% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 91% of the time and exported out of Alberta over the Saskatchewan tie-line 5% of the time last week. There was no activity on the Saskatchewan tie-line 4% of the time last week.

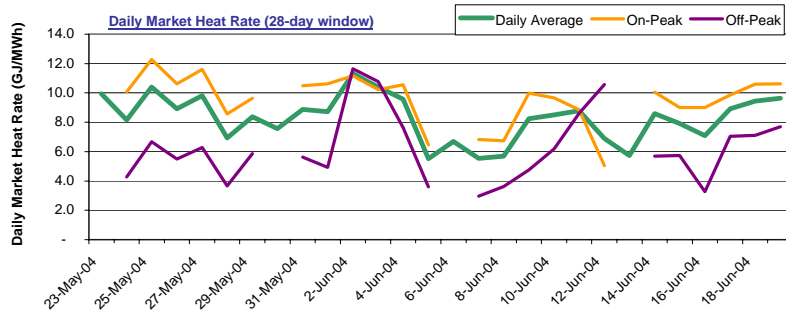
### Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 46.3% while the second most active importer had a market share of 21.9%. There were a total of 5 exporters last week. The most active exporter had a market share of 84.1% while the next largest exporter had a market share of 12.3%.

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 8.3 GJ/MWh and ranged from a low of 5.5 GJ/MWh to a high of 11.3 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 9.5 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.2 GJ/MWh.

### Sparksreads

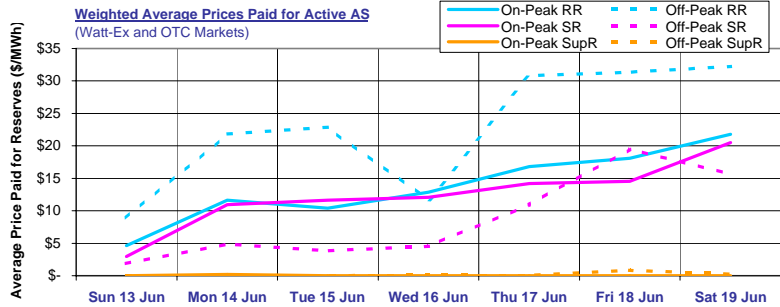
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak			
		Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5
Sun 13 Jun	\$ 6.35	\$ 36.42	(11.20)	(27.07)	NA	NA	NA	NA	\$ 36.42	(11.20)	(27.07)
Mon 14 Jun	\$ 6.53	\$ 56.08	7.14	(9.18)	\$ 65.55	16.60	0.28	\$ 37.15	(11.80)	(28.11)	
Tue 15 Jun	\$ 6.77	\$ 53.56	2.82	(14.09)	\$ 60.96	10.22	(6.69)	\$ 38.76	(11.98)	(28.89)	
Wed 16 Jun	\$ 6.76	\$ 47.98	(2.75)	(19.66)	\$ 60.92	10.19	(6.72)	\$ 22.12	(28.61)	(45.52)	
Thu 17 Jun	\$ 6.93	\$ 61.83	9.86	(7.46)	\$ 68.33	16.37	(0.96)	\$ 48.83	(3.14)	(20.47)	
Fri 18 Jun	\$ 6.90	\$ 65.14	13.38	(3.87)	\$ 73.18	21.43	4.18	\$ 49.05	(2.70)	(19.95)	
Sat 19 Jun	\$ 6.93	\$ 66.82	14.83	(2.50)	\$ 73.56	21.56	4.23	\$ 53.36	1.36	(15.97)	

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

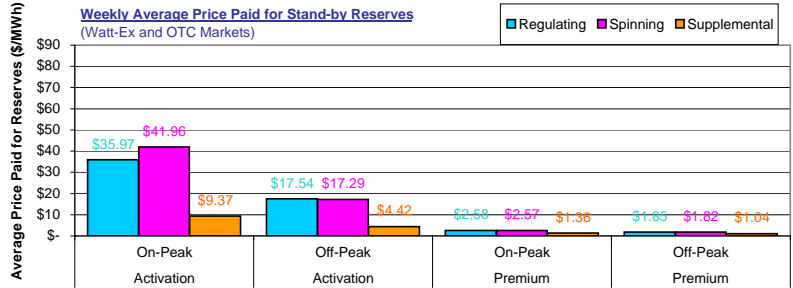
On-peak sparksreads last week were all positive for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

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

# Ancillary Services Market

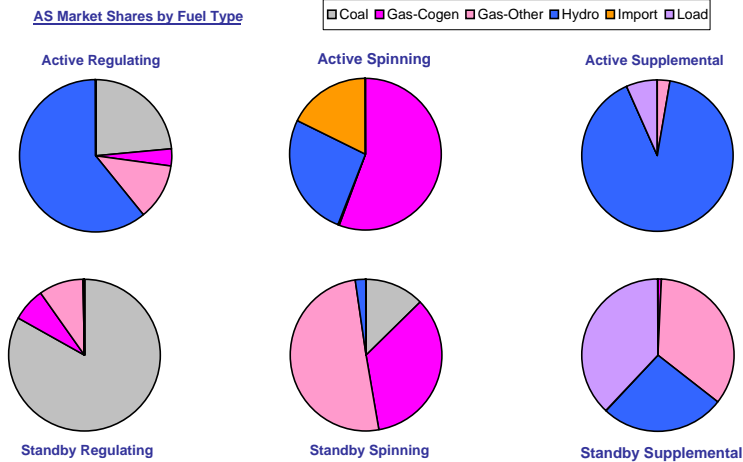


Average on-peak prices paid for active ancillary services last week were \$13.74/MWh, \$12.46/MWh and \$0.03/MWh respectively for active regulating, spinning and supplemental reserves. Active average off-peak prices were somewhat higher and averaged \$22.82/MWh, \$8.77/MWh and \$0.18/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.42/MWh for off-peak supplemental reserves to \$41.96/MWh for on-peak spinning reserves. Weekly average premium prices ranged from \$1.04/MWh for off-peak supplemental reserves up to \$2.58/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 61.0%. In the active spinning reserve market, gas-cogen units had the leading market share with 55.5% while in the active supplemental reserve market, hydro units dominated with a 90.6% market share.

Coal units dominated the standby regulating reserve market with a 82.9% market share. Leading market share in the standby spinning market was held by gas units with a 50.6% market share. In the standby supplemental reserve market, Load units had the leading market share with 38.0%.

## 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 MAPP-N: 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 MAPP-N: 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.
- Sparks spread** 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.