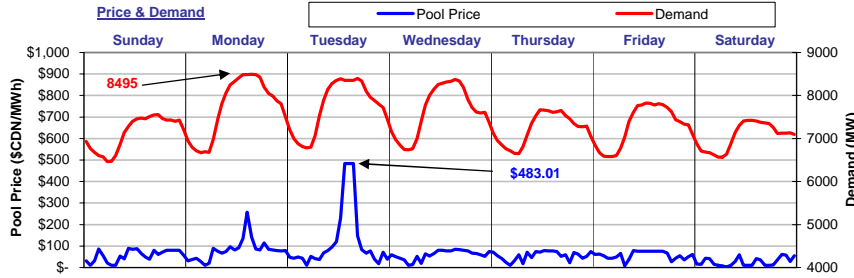


The Market Monitor

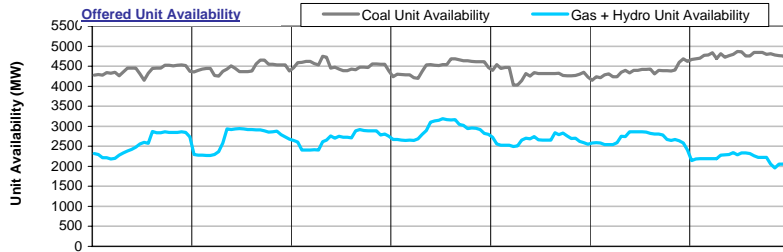
WATCHING THE MARKET : your fact source

Week Ending July 3, 2004

Weekly Highlights

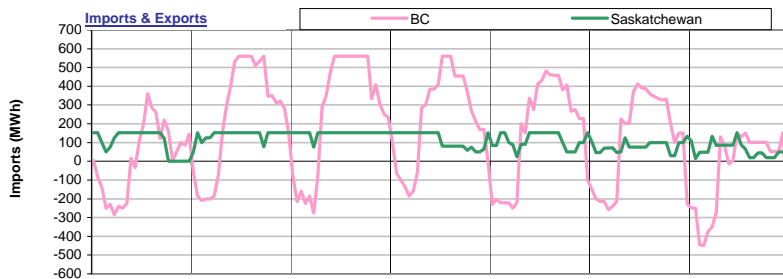


For the week ending July 3, 2004, **Pool Price** averaged \$65.40/MWh and ranged from a minimum of \$3.70/MWh in HE08 on Saturday to a maximum of \$483.01/MWh in HE14 on Tuesday. **Demand** reached a high of 8495 MW in HE16 on Monday and a low of 6464 MW in HE06 on Sunday. Average demand for the week was 7405MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.28.

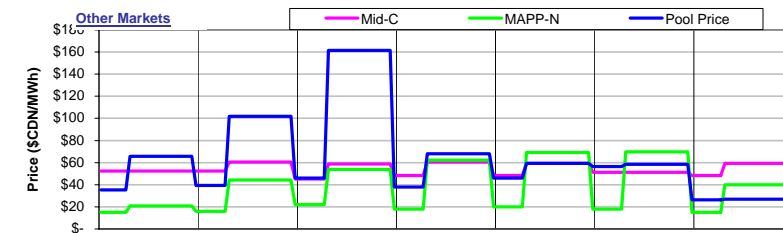


Coal Unit Availability averaged 4471 MW last week. This is an equivalent availability of 81% (based on MCR). **Gas and Hydro Unit Availability** averaged 2629MW last week, which is an equivalent of 47% (based on MCR).

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

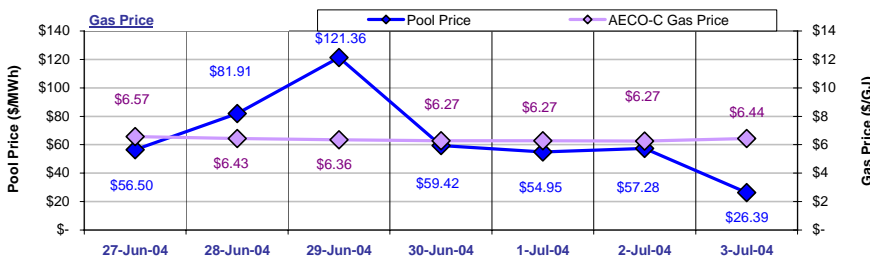


Alberta was a net importer from **BC** last week with total imports equal to 23,534MWh. Alberta was a net importer from **Saskatchewan** last week with total imports equal to 18,285MWh. Overall, Alberta imported 41,819MWh of electricity last week.



Pool Prices were generally higher than prices in **Mid-C** and higher than prices in **MAPP-N** last week. **Mid-C** prices averaged \$58.26/MWh on-peak and \$49.46/MWh off-peak. **MAPP-N** prices averaged \$56.49/MWh on-peak and \$17.75/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.3807.

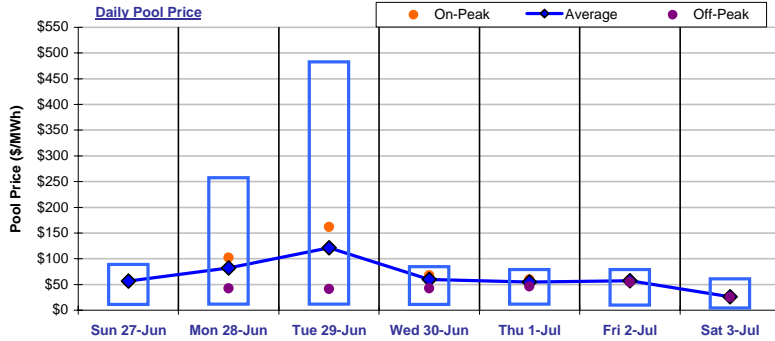


The average **AECO-C Gas Price** last week was \$6.37/GJ and ranged from a minimum of \$6.27/GJ to \$6.57/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 4.10GJ/MWh to a high of 19.10GJ/MWh. The average market heat rate for the week was 10.27GJ/MWh.

Wholesale Market

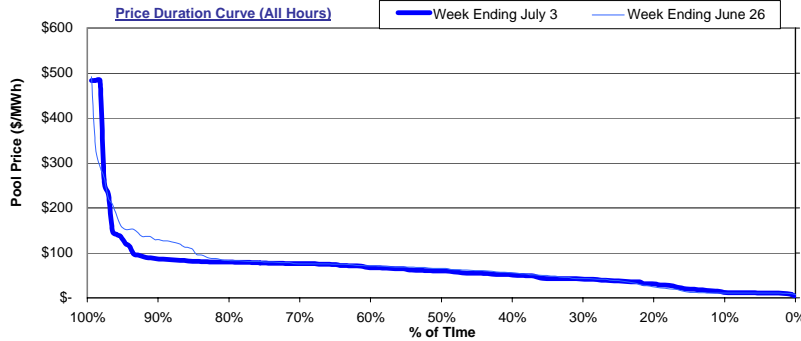
Weekly Market Statistics

	Sunday 27-Jun	Monday 28-Jun	Tuesday 29-Jun	Wednesday 30-Jun	Thursday 1-Jul	Friday 2-Jul	Saturday 3-Jul	Average	Last Week	% Change	YTD
Pool Price											
Average	\$ 56.50	\$ 81.91	\$ 121.36	\$ 59.42	\$ 54.95	\$ 57.28	\$ 26.39	\$ 65.40	\$ 69.69	-6.2%	\$ 54.32
On-Peak	NA	\$ 101.77	\$ 161.54	\$ 67.93	\$ 59.44	\$ 58.51	\$ 26.82	\$ 79.33	\$ 76.27	4.0%	\$ 62.80
Off-Peak	\$ 56.50	\$ 42.18	\$ 41.02	\$ 42.39	\$ 45.96	\$ 54.82	\$ 25.53	\$ 46.82	\$ 60.93	-23.1%	\$ 39.27
COV	0.47	0.61	1.21	0.37	0.39	0.33	0.71	0.58	0.73	-20.7%	
Demand											
Average	7,132	7,733	7,744	7,645	7,232	7,299	7,053	7,405	7,331	1.0%	7,357
Minimum	6,464	6,672	6,785	6,739	6,648	6,581	6,566	6,636	6,497	2.1%	6,017
Maximum	7,553	8,495	8,401	8,373	7,665	7,827	7,426	7,963	7,924	0.5%	8,967
Coal Unit Availability											
Average	4,395	4,448	4,519	4,484	4,303	4,373	4,774	4,471	4,504		4,928
Utilization	80%	81%	82%	81%	78%	79%	86%	81%	82%	-0.6%	89%
Gas and Hydro Unit Availability											
Average	2,560	2,693	2,693	2,910	2,652	2,691	2,204	2,629	2,345		2,253
Utilization	54%	57%	57%	61%	56%	57%	46%	47%	41%	5.0%	40%



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 **\$79.33/MWh** while the **off-peak Pool price** for the week was **\$46.82/MWh**.

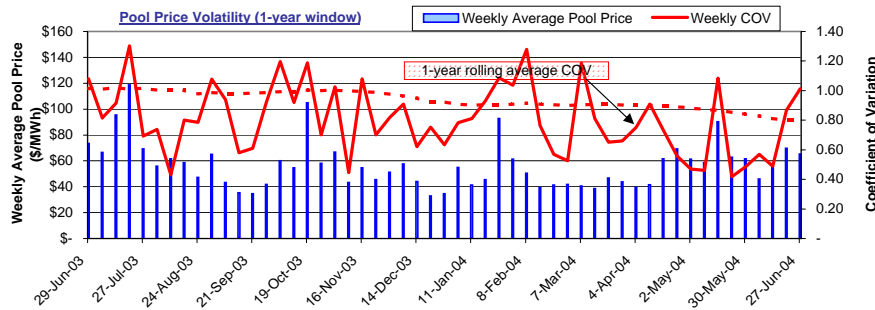
Note: Sundays and most statutory holidays are defined as off-peak.



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

For the week ending **July 3**, prices were at or below:

- \$20/MWh 15% of the time
- \$50/MWh 39% of the time
- \$100/MWh 93% of the time
- \$250/MWh 97% of the time
- \$500/MWh 100% of the time



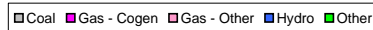
The chart plots average weekly **Pool Price** and the **Coefficient of Variation (COV)** of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility **increased** for the week ending **July 3** from the previous week.

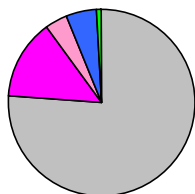
Pool price volatility also moved **above** the 1-year rolling average COV value.

Market Share Statistics

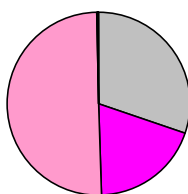
By Fuel Type:



Weekly Generation by Fuel Type

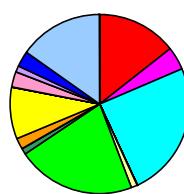


Weekly Price Setting by Fuel Type



By Submitting Customer:

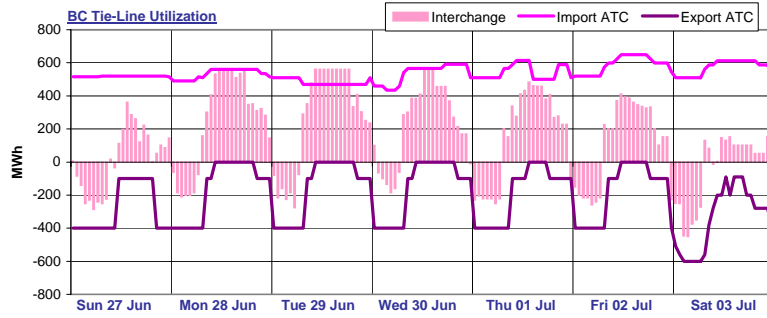
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for **76.0%** of the generation in the province and set price **30.3%** of the time. **Gas-cogen** units accounted for **13.9%** of the generation and set price **19.3%** of the time last week while **other gas** units made up **3.9%** of generation and set price **50.2%** of the time.

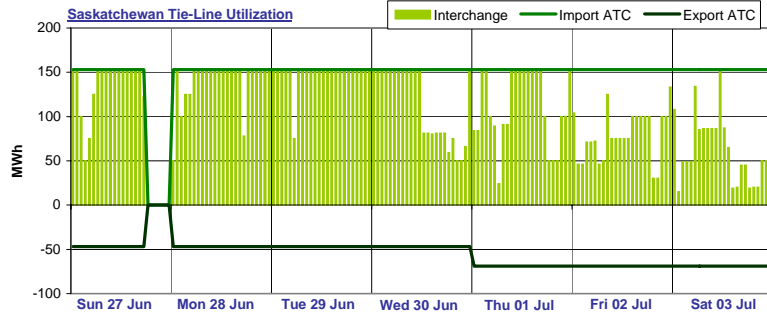
A total of **12** market participants set price last week. **Two** market participants set price more than **20%** of the time last week. The top price setter set price **24.4%** of the time and the top five price setters set price a total of **84.9%** of the time.

Interties



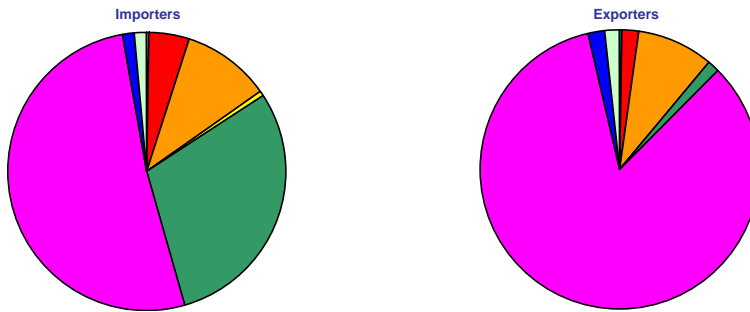
BC import capacity was 38% utilized last week while BC export capacity was 21% utilized. Energy was being imported into Alberta over the BC tie-line 67% of the time and exported out of Alberta over the BC tie-line 33% of the time last week. There was no activity on the BC tie-line 0% of the time last 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 74% utilized last week while Saskatchewan export capacity was 0% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 96% 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 4% of the time last week.

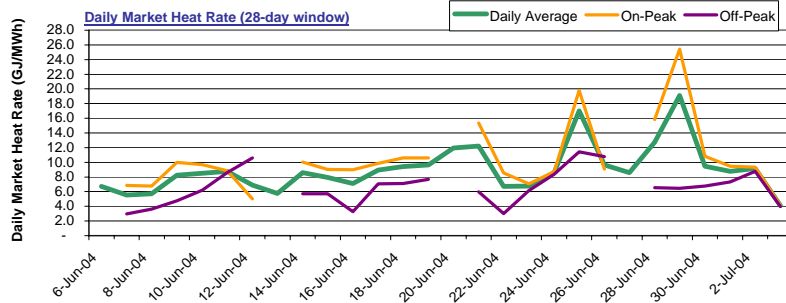
Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 51.5% while the second most active importer had a market share of 29.7%. There were a total of 7 exporters last week. The most active exporter had a market share of 83.9% while the next largest exporter had a market share of 8.9%.

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 9.0 GJ/MWh and ranged from a low of 4.1 GJ/MWh to a high of 19.1 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 10.4 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.6 GJ/MWh.

Sparksreads

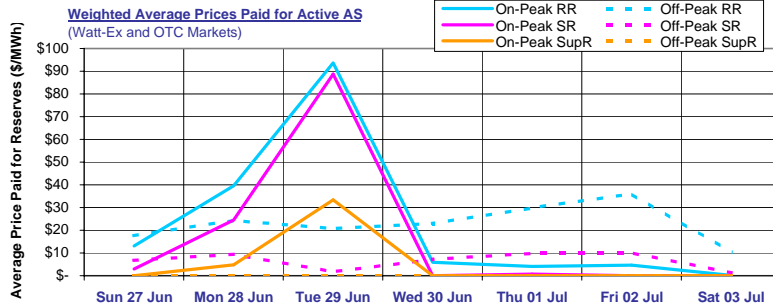
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak		
		Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0
Sun 27 Jun	\$ 6.57	\$ 56.50	7.21	(9.22)	NA	NA	NA	\$ 56.50	7.21	(9.22)
Mon 28 Jun	\$ 6.43	\$ 81.91	33.66	17.57	\$ 101.77	53.52	37.44	\$ 42.18	(6.07)	(22.15)
Tue 29 Jun	\$ 6.36	\$ 121.36	73.70	57.81	\$ 161.54	113.87	97.98	\$ 41.02	(6.65)	(22.54)
Wed 30 Jun	\$ 6.27	\$ 59.42	12.40	(3.28)	\$ 67.93	20.91	5.24	\$ 42.39	(4.63)	(20.31)
Thu 01 Jul	\$ 6.27	\$ 54.95	7.93	(7.74)	\$ 59.44	12.42	(3.25)	\$ 45.96	(1.06)	(16.73)
Fri 02 Jul	\$ 6.27	\$ 57.28	10.28	(5.39)	\$ 58.51	11.51	(4.16)	\$ 54.82	7.82	(7.85)
Sat 03 Jul	\$ 6.44	\$ 26.39	(21.94)	(38.05)	\$ 26.82	(21.51)	(37.62)	\$ 25.53	(22.79)	(38.90)

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 negative for a heat rate of 10.0 GJ/MWh.

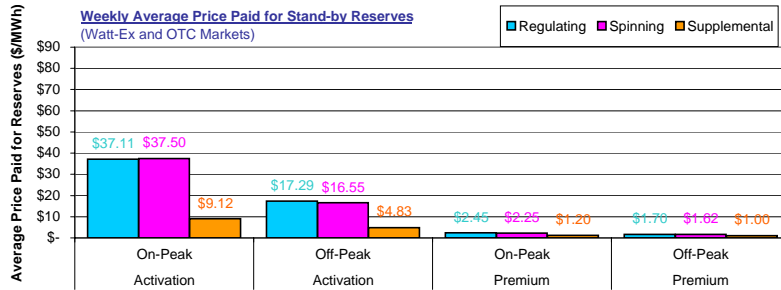
Off-peak sparksreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and all negative for a heat rate of 10.0 GJ/MWh.

Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$23.18/MWh, \$17.24/MWh and \$5.68/MWh respectively for active regulating, spinning and supplemental reserves.

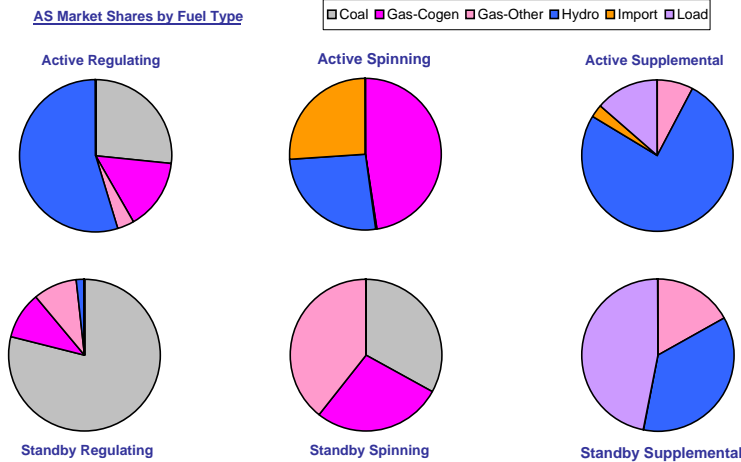
Active average off-peak prices were somewhat lower and averaged \$23.13/MWh, \$6.64/MWh and \$0.04/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.83/MWh for off-peak supplemental reserves to \$37.50/MWh for on-peak spinning reserves.

Weekly average premium prices ranged from \$1.00/MWh for off-peak supplemental reserves up to \$2.45/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 54.7%. In the active spinning reserve market, gas-cogen units had the leading market share with 47.6% while in the active supplemental reserve market, hydro units dominated with a 75.9% market share.

Coal units dominated the standby regulating reserve market with a 78.9% market share. Leading market share in the standby spinning market was held by gas-other units with a 39.5% market share. In the standby supplemental reserve market, load units had the leading market share with 47.0%.

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.