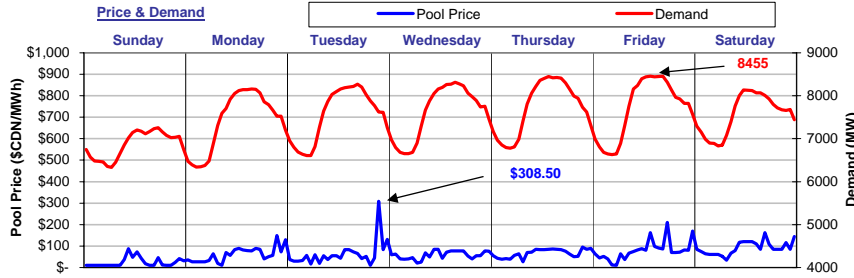


The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending July 17, 2004

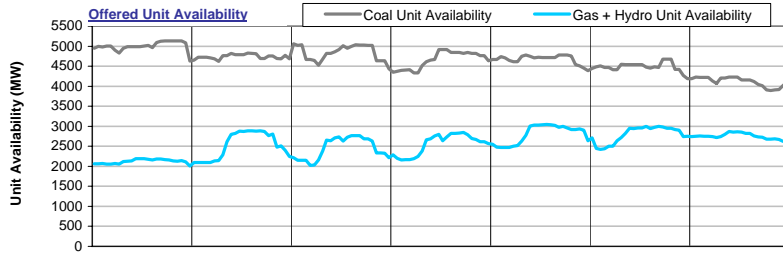
Weekly Highlights



For the week ending July 17, 2004, **Pool Price** averaged \$63.69/MWh and ranged from a minimum of \$10.88/MWh in HE06 on Sunday to a maximum of \$308.50/MWh in HE22 on Tuesday.

Demand reached a high of 8455MW in HE17 on Friday and a low of 6334MW in HE07 on Sunday. Average demand for the week was 7495MW.

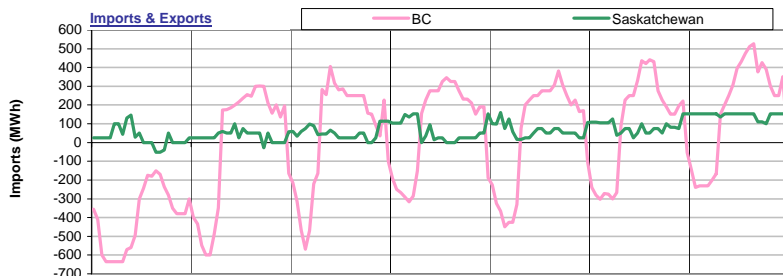
Pool Price and **Demand** were positively correlated last week with an R-squared value of 0.28.



Coal Unit Availability averaged 4646 MW last week. This is an equivalent availability of 84% (based on MCR).

Gas and Hydro Unit Availability averaged 2572MW last week, which is an equivalent of 46% (based on MCR).

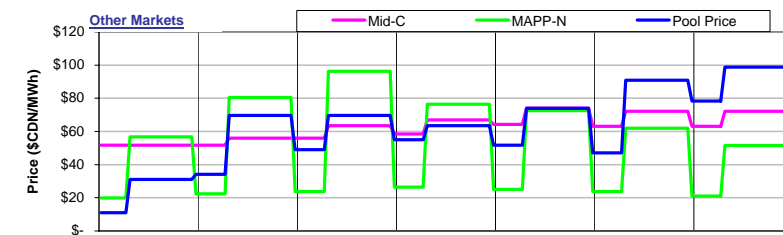
Availability numbers are based on MW offered into the energy merit order.



Alberta was a net importer from **BC** last week with total imports equal to 1,201MWh.

Alberta was a net importer from **Saskatchewan** last week with total imports equal to 11,263MWh.

Overall, Alberta imported 12,464MWh of electricity last week.

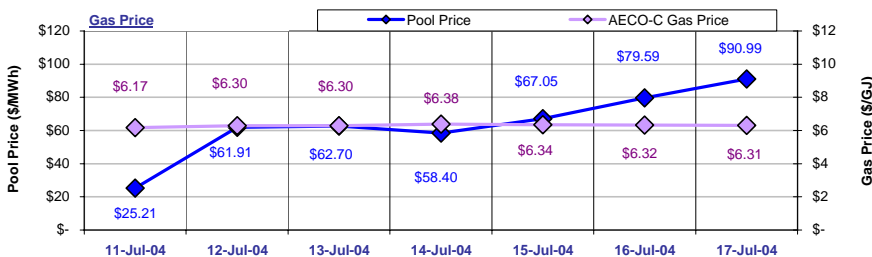


Pool Prices were generally higher than prices in **Mid-C** and higher than prices in **MAPP-N** last week.

Mid-C prices averaged \$67.48/MWh on-peak and \$58.36/MWh off-peak.

MAPP-N prices averaged \$73.19/MWh on-peak and \$23.17/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.3187.



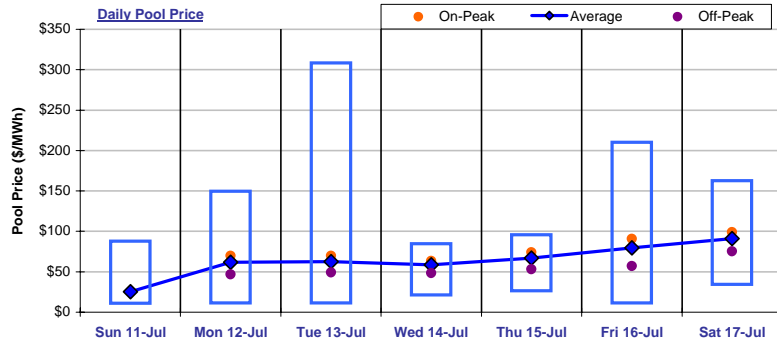
The average **AECO-C Gas Price** last week was \$6.30/GJ and ranged from a minimum of \$6.17/GJ to \$6.38/GJ.

Prevailing gas prices resulted in market heat rates ranging from a low of 4.08GJ/MWh to a high of 14.42GJ/MWh. The average market heat rate for the week was 10.09GJ/MWh.

Wholesale Market

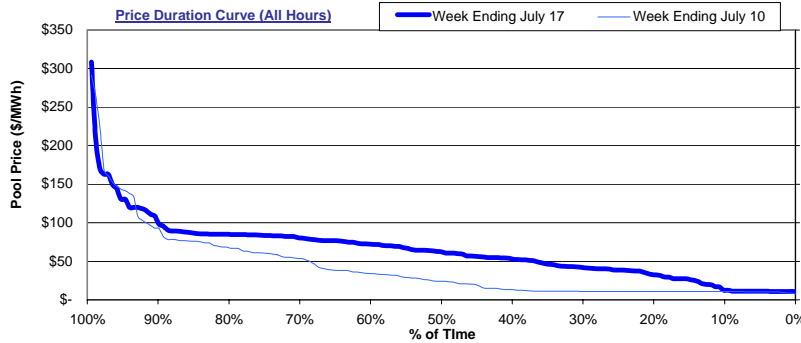
Weekly Market Statistics

	Sunday 11-Jul	Monday 12-Jul	Tuesday 13-Jul	Wednesday 14-Jul	Thursday 15-Jul	Friday 16-Jul	Saturday 17-Jul	Average	Last Week	% Change	YTD
Pool Price											
Average	\$ 25.21	\$ 61.91	\$ 62.70	\$ 58.40	\$ 67.05	\$ 79.59	\$ 90.99	\$ 63.69	\$ 41.61	53.1%	\$ 54.20
On-Peak	NA	\$ 69.57	\$ 69.56	\$ 63.54	\$ 73.95	\$ 90.85	\$ 98.85	\$ 77.72	\$ 52.60	47.8%	\$ 62.97
Off-Peak	\$ 25.21	\$ 46.60	\$ 48.98	\$ 48.13	\$ 53.25	\$ 57.05	\$ 75.26	\$ 44.99	\$ 26.97	66.8%	\$ 39.27
COV	0.86	0.56	0.93	0.32	0.30	0.57	0.34	0.56	0.86	-35.3%	
Demand											
Average	6,866	7,426	7,560	7,617	7,723	7,706	7,566	7,495	7,210	3.9%	7,358
Minimum	6,334	6,343	6,608	6,652	6,779	6,629	6,831	6,597	6,462	2.1%	6,017
Maximum	7,256	8,155	8,270	8,318	8,447	8,455	8,137	8,148	7,766	4.9%	8,967
Coal Unit Availability											
Average	5,006	4,740	4,840	4,659	4,677	4,486	4,116	4,646	4,841		4,915
Utilization	91%	86%	88%	84%	85%	81%	75%	84%	88%	-3.5%	89%
Gas and Hydro Unit Availability											
Average	2,122	2,526	2,452	2,555	2,803	2,795	2,751	2,572	2,302		2,266
Utilization	45%	53%	51%	54%	59%	59%	58%	45%	41%	4.8%	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 \$77.72/MWh while the off-peak Pool price for the week was \$44.99/MWh.

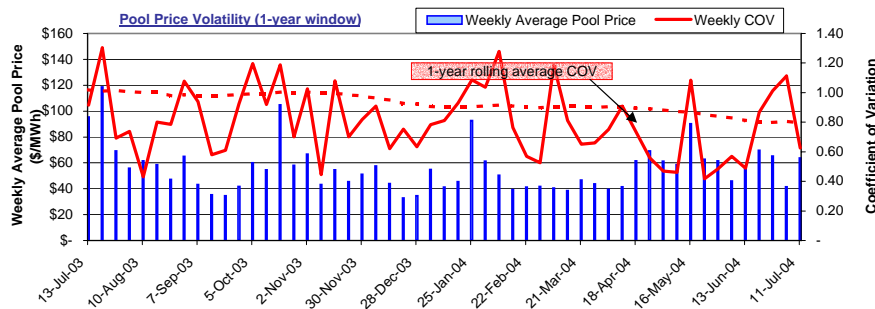
Note: Sundays and most statutory holidays are defined as off-peak.



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 17, prices were at or below:

- \$20/MWh 13% of the time
- \$50/MWh 36% of the time
- \$100/MWh 90% of the time
- \$250/MWh 99% of the time
- \$500/MWh 100% of the time



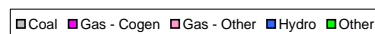
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility decreased for the week ending July 17 from the previous week.

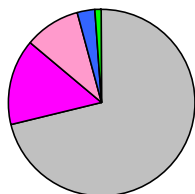
Pool price volatility also moved below the 1-year rolling average COV value.

Market Share Statistics

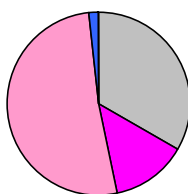
By Fuel Type:



Weekly Generation by Fuel Type

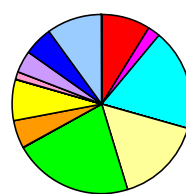


Weekly Price Setting by Fuel Type



By Submitting Customer:

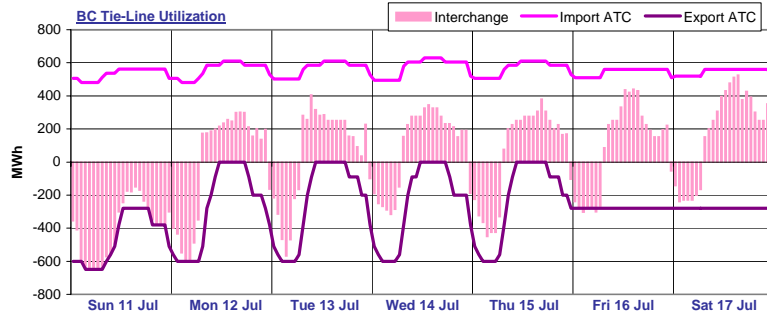
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 71.0% of the generation in the province and set price 33.3% of the time. Gas-cogen units accounted for 15.1% of the generation and set price 13.3% of the time last week while other gas units made up 9.7% of generation and set price 51.6% of the time.

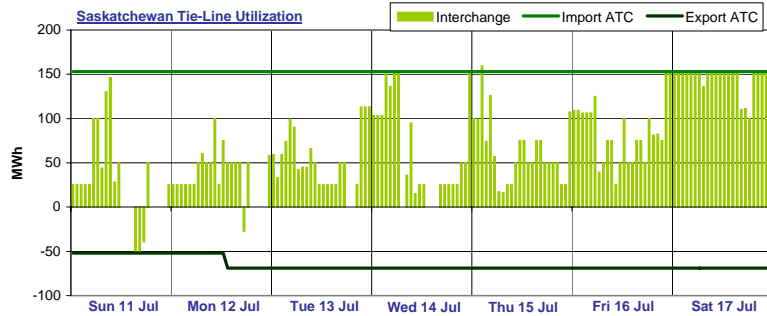
A total of 11 market participants set price last week. One market participants set price more than 20% of the time last week. The top price setter set price 21.4% of the time and the top five price setters set price a total of 74.4% of the time.

Interties



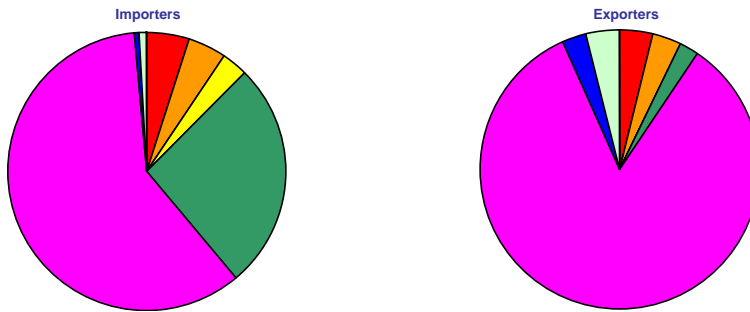
BC import capacity was 26% utilized last week while BC export capacity was 37% utilized. Energy was being imported into Alberta over the BC tie-line 58% of the time and exported out of Alberta over the BC tie-line 42% of the time last week. There was no activity on the BC tie-line 0% of the time last 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 44% utilized last week while Saskatchewan export capacity was 2% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 88% of the time and exported out of Alberta over the Saskatchewan tie-line 2% of the time last week. There was no activity on the Saskatchewan tie-line 10% of the time last week.

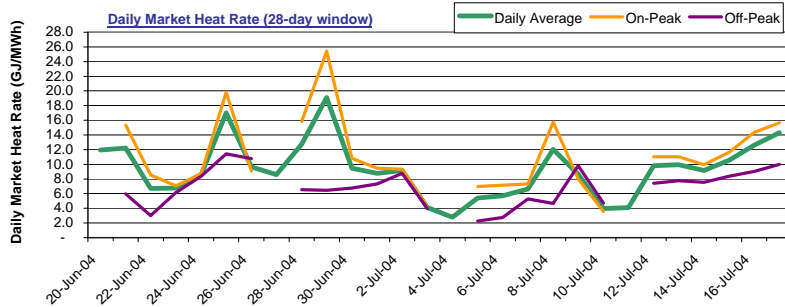
Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 59.8% while the second most active importer had a market share of 26.4%. There were a total of 6 exporters last week. The most active exporter had a market share of 84.1% while the next largest exporter had a market share of 4.0%.

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 9.3 GJ/MWh and ranged from a low of 2.8 GJ/MWh to a high of 19.1 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 11.1 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.9 GJ/MWh.

Sparksreads

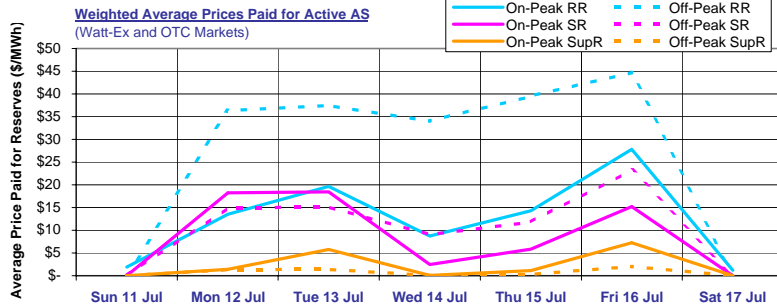
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak				
		Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5
Sun 11 Jul	\$ 6.17	\$ 25.21	(21.08)	(36.51)	NA	NA	NA	\$ 25.21	(21.08)	(36.51)		
Mon 12 Jul	\$ 6.30	\$ 61.91	14.69	(1.06)	\$ 69.57	22.34	6.60	\$ 46.60	(0.63)	(16.37)		
Tue 13 Jul	\$ 6.30	\$ 62.70	15.48	(0.25)	\$ 69.56	22.34	6.60	\$ 48.98	1.77	(13.97)		
Wed 14 Jul	\$ 6.38	\$ 58.40	10.55	(5.40)	\$ 63.54	15.69	(0.27)	\$ 48.13	0.27	(15.68)		
Thu 15 Jul	\$ 6.34	\$ 67.05	19.48	3.62	\$ 73.95	26.38	10.53	\$ 53.25	5.68	(10.18)		
Fri 16 Jul	\$ 6.32	\$ 79.59	32.15	16.34	\$ 90.85	43.41	27.60	\$ 57.05	9.62	(6.20)		
Sat 17 Jul	\$ 6.31	\$ 90.32	43.01	27.24	\$ 98.85	51.54	35.77	\$ 62.89	15.58	(0.19)		

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.

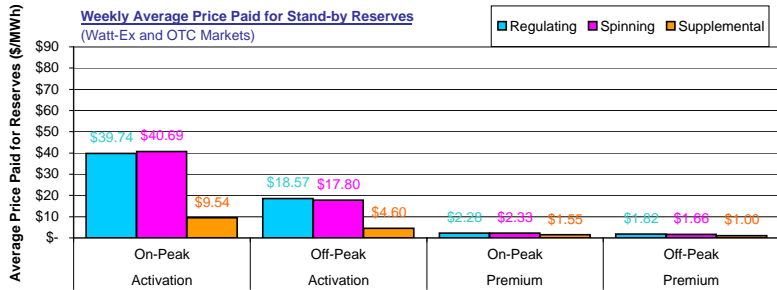
On-peak sparksreads last week were all positive for a heat rate of 7.5 GJ/MWh and mostly positive for a heat rate of 10.0 GJ/MWh.

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

Ancillary Services Market

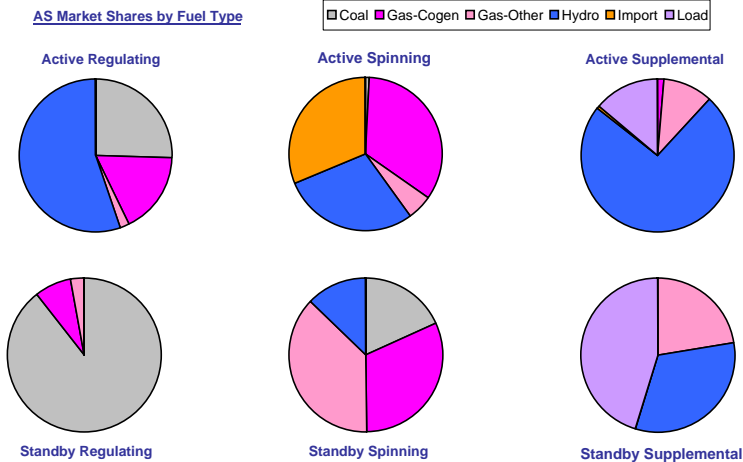


Average on-peak prices paid for active ancillary services last week were \$12.35/MWh, \$8.94/MWh and \$2.31/MWh respectively for active **regulating**, **spinning** and **supplemental** reserves. Active average off-peak prices were somewhat higher and averaged \$28.16/MWh, \$10.72/MWh and \$0.72/MWh for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.60/MWh for off-peak supplemental reserves to \$40.69/MWh for on-peak spinning reserves. Weekly average premium prices ranged from \$1.00/MWh for off-peak supplemental reserves up to \$2.33/MWh for on-peak spinning reserves.

AS Market Shares by Fuel Type



Last week **hydro** units had the largest market share in the **active regulating** reserve market with 55.2%. In the **active spinning** reserve market, **gas-cogen** units had the leading market share with 33.9% while in the **active supplemental** reserve market, **hydro** units dominated with a 73.6% market share.

Coal units dominated the **standby regulating** reserve market with a 89.5% market share. Leading market share in the **standby spinning** market was held by **gas-other** units with a 37.5% market share. In the **standby supplemental** reserve market, **load** units had the leading market share with 45.2%.

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.