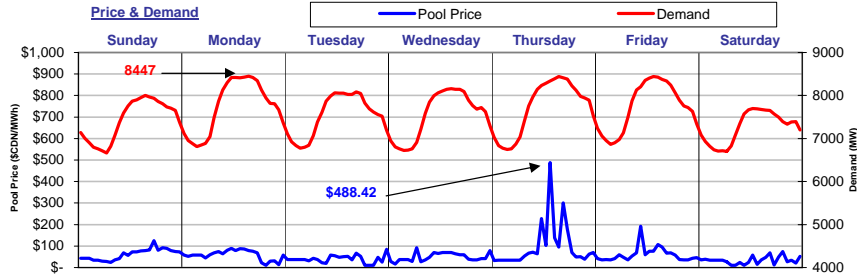


The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending July 31, 2004

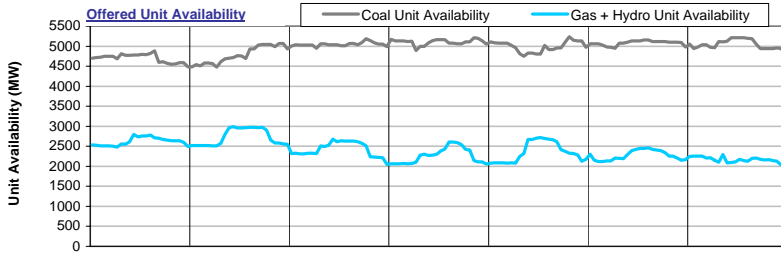
Weekly Highlights



For the week ending July 31, 2004, **Pool Price** averaged \$57.48/MWh and ranged from a minimum of \$10.35/MWh in HE09 on Saturday to a maximum of \$488.42/MWh in HE14 on Thursday.

Demand reached a high of 8447 MW in HE16 on Monday and a low of 6667 MW in HE07 on Sunday. Average demand for the week was 7572MW.

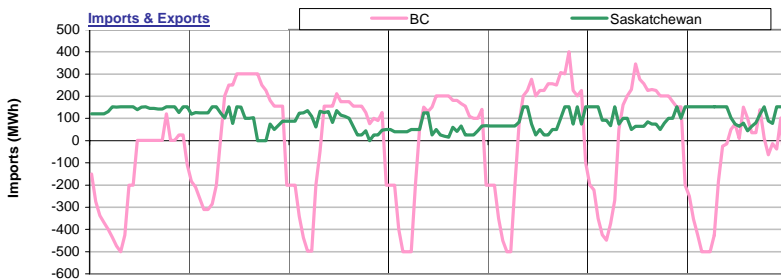
Pool Price and **Demand** were positively correlated last week with an R-squared value of 0.19.



Coal Unit Availability averaged 4964 MW last week. This is an equivalent availability of 90% (based on MCR).

Gas and Hydro Unit Availability averaged 2406MW last week, which is an equivalent of 43% (based on MCR).

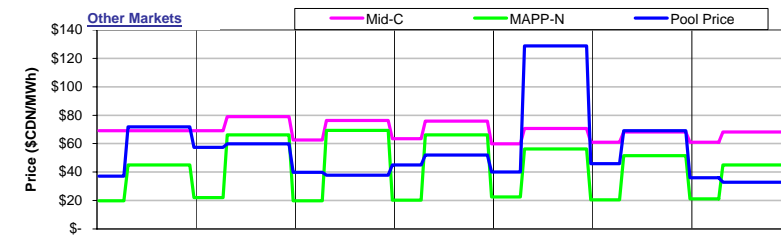
Availability numbers are based on MW offered into the energy merit order.



Alberta was a net exporter to **BC** last week with total exports equal to 3,327MWh.

Alberta was a net importer from **Saskatchewan** last week with total imports equal to 16,246MWh.

Overall, Alberta imported 12,919MWh of electricity last week.

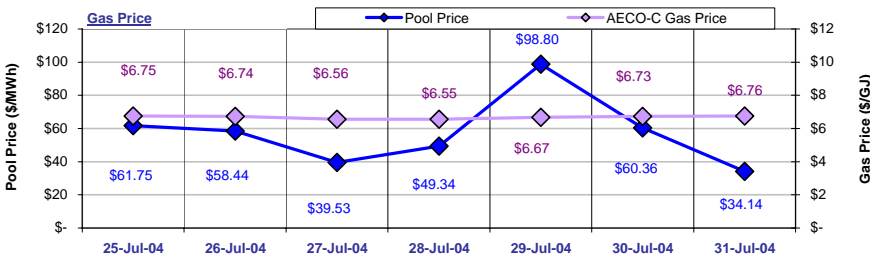


Pool Prices were generally lower than prices in **Mid-C** and higher than prices in **MAPP-N** last week.

Mid-C prices averaged \$72.98/MWh on-peak and \$63.74/MWh off-peak.

MAPP-N prices averaged \$59.03/MWh on-peak and \$20.86/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.3216.



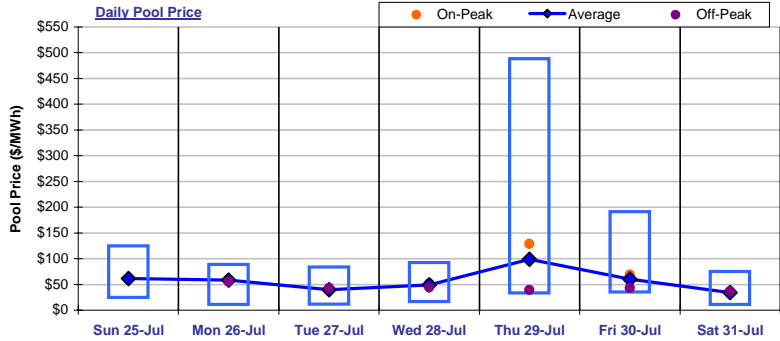
The average **AECO-C Gas Price** last week was \$6.68/GJ and ranged from a minimum of \$6.55/GJ to \$6.76/GJ.

Prevailing gas prices resulted in market heat rates ranging from a low of 5.05GJ/MWh to a high of 14.81GJ/MWh. The average market heat rate for the week was 8.60GJ/MWh.

Wholesale Market

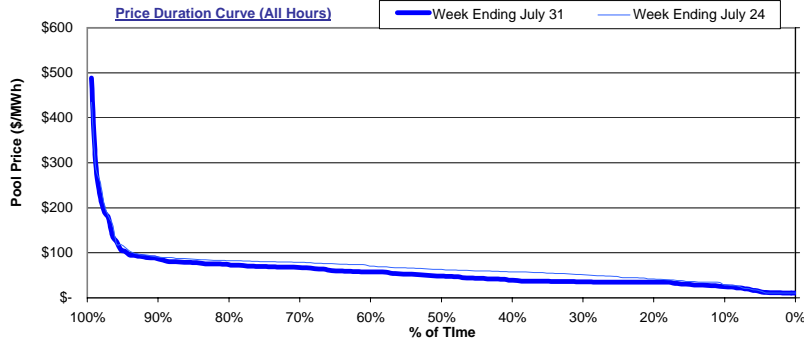
Weekly Market Statistics

	Sunday 25-Jul	Monday 26-Jul	Tuesday 27-Jul	Wednesday 28-Jul	Thursday 29-Jul	Friday 30-Jul	Saturday 31-Jul	Average	Last Week	% Change	YTD
Pool Price											
Average	\$ 61.75	\$ 58.44	\$ 39.53	\$ 49.34	\$ 98.80	\$ 60.36	\$ 34.14	\$ 57.48	\$ 67.85	-15.3%	\$ 54.76
On-Peak	NA	\$ 59.90	\$ 37.77	\$ 51.93	\$ 128.64	\$ 69.05	\$ 32.79	\$ 63.35	\$ 72.09	-12.1%	\$ 63.28
Off-Peak	\$ 61.75	\$ 55.54	\$ 43.05	\$ 44.18	\$ 39.12	\$ 42.96	\$ 36.83	\$ 49.66	\$ 62.19	-20.2%	\$ 39.98
COV	0.41	0.39	0.45	0.40	1.08	0.57	0.52	0.55	0.48	12.8%	
Demand											
Average	7,432	7,748	7,539	7,546	7,730	7,743	7,264	7,572	7,654	-1.1%	7,376
Minimum	6,667	6,811	6,778	6,722	6,743	6,861	6,700	6,755	6,797	-0.6%	6,017
Maximum	8,001	8,447	8,083	8,156	8,443	8,445	7,697	8,182	8,281	-1.2%	8,967
Coal Unit Availability											
Average	4,700	4,782	5,047	5,105	4,988	5,080	5,045	4,964	4,622	6.2%	4,907
Utilization	85%	87%	91%	92%	90%	92%	91%	90%	84%		89%
Gas and Hydro Unit Availability											
Average	2,619	2,731	2,427	2,264	2,357	2,276	2,168	2,406	2,844	-7.7%	2,289
Utilization	55%	57%	51%	48%	49%	48%	46%	43%	50%		40%



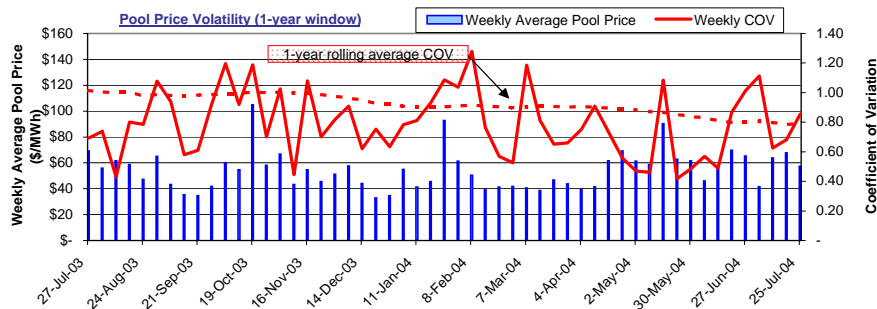
The Daily Pool Price graph plots the daily range in hourly Pool price (defined by the blue box) along with the daily average and daily on and off-peak prices. The on-peak Pool price for the week was \$63.35/MWh while the off-peak Pool price for the week was \$49.66/MWh.

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 31, prices were at or below:
 \$20/MWh 7% of the time
 \$50/MWh 52% of the time
 \$100/MWh 94% of the time
 \$250/MWh 98% of the time
 \$500/MWh 100% of the time



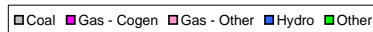
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility increased for the week ending July 31 from the previous week.

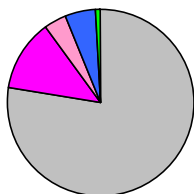
Pool price volatility also moved above the 1-year rolling average COV value.

Market Share Statistics

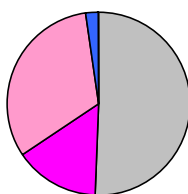
By Fuel Type:



Weekly Generation by Fuel Type



Weekly Price Setting by Fuel Type



By Submitting Customer:

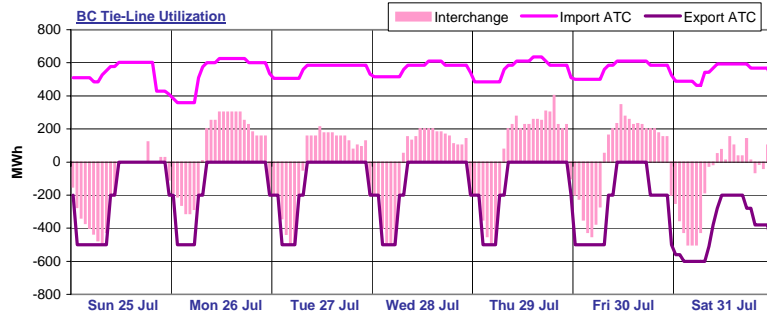
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 77.5% of the generation in the province and set price 50.5% of the time. Gas-cogen units accounted for 12.6% of the generation and set price 15.0% of the time last week while other gas units made up 3.7% of generation and set price 32.2% of the time.

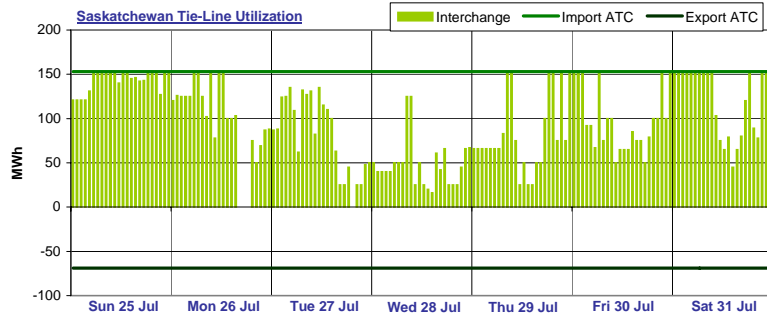
A total of 12 market participants set price last week. One market participant set price more than 20% of the time last week. The top price setter set price 31.1% of the time and the top five price setters set price a total of 78.0% of the time.

Interties



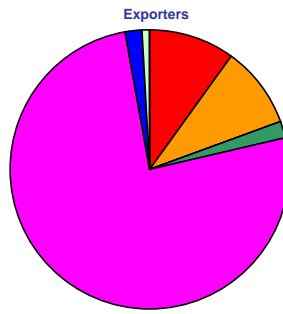
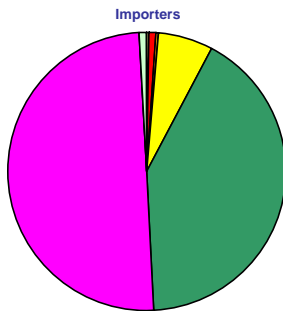
BC import capacity was 16% utilized last week while BC export capacity was 56% utilized. Energy was being imported into Alberta over the BC tie-line 60% of the time and exported out of Alberta over the BC tie-line 40% of the time last week. There was no activity on the BC tie-line 0% of the time last 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 63% utilized last week while Saskatchewan export capacity was 0% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 98% 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 2% of the time last week.

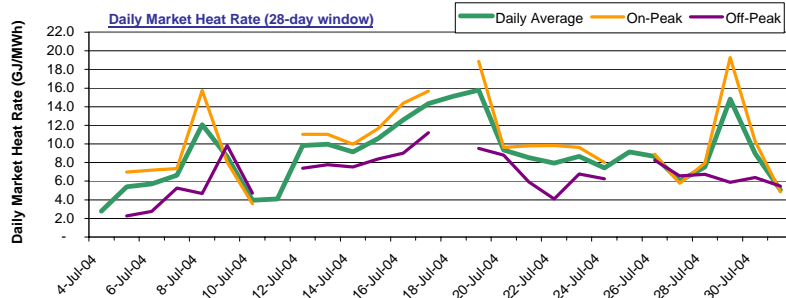
Tie-Line Market Shares



Last week, there were a total of 7 importers. The most active importer had a market share of 50.1% while the second most active importer had a market share of 41.3%. There were a total of 6 exporters last week. The most active exporter had a market share of 75.9% while the next largest exporter had a market share of 9.9%.

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 8.9 GJ/MWh and ranged from a low of 2.8 GJ/MWh to a high of 15.8 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 10.2 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.7 GJ/MWh.

Sparksreads

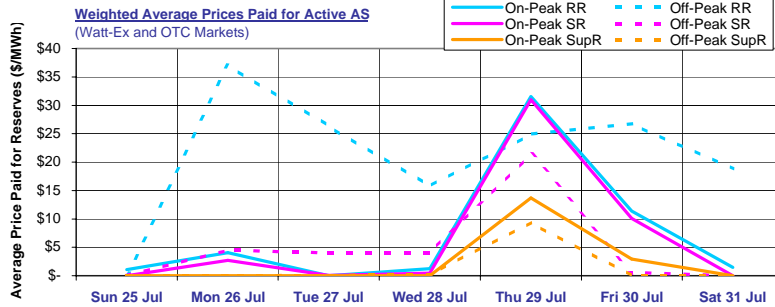
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak				
		Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh)	HR=7.5	HR=10.0
Sun 25 Jul	\$ 6.75	\$ 61.75	11.09	(5.80)	NA	NA	NA	\$ 61.75	11.09	(5.80)		
Mon 26 Jul	\$ 6.74	\$ 58.44	7.90	(8.94)	\$ 59.90	9.36	(7.49)	\$ 55.54	5.00	(11.85)		
Tue 27 Jul	\$ 6.56	\$ 39.53	(9.65)	(26.04)	\$ 37.77	(11.41)	(27.80)	\$ 43.05	(6.13)	(22.53)		
Wed 28 Jul	\$ 6.55	\$ 49.34	0.19	(16.19)	\$ 51.93	2.78	(13.61)	\$ 44.18	(4.97)	(21.35)		
Thu 29 Jul	\$ 6.67	\$ 98.80	48.78	32.11	\$ 128.64	78.62	61.95	\$ 39.12	(10.90)	(27.57)		
Fri 30 Jul	\$ 6.73	\$ 60.36	9.91	(6.90)	\$ 69.05	18.61	1.80	\$ 42.96	(7.49)	(24.30)		
Sat 31 Jul	\$ 6.76	\$ 34.14	(16.54)	(33.43)	\$ 32.79	(17.88)	(34.77)	\$ 36.83	(13.84)	(30.73)		

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.

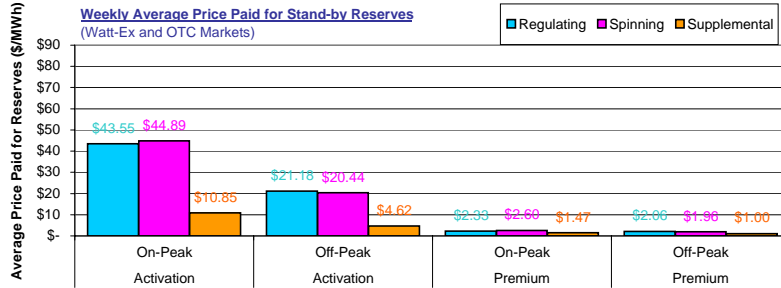
Off-peak sparksreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and all negative for a heat rate of 10.0 GJ/MWh.

Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$12.78/MWh, \$11.45/MWh and \$4.45/MWh respectively for active regulating, spinning and supplemental reserves.

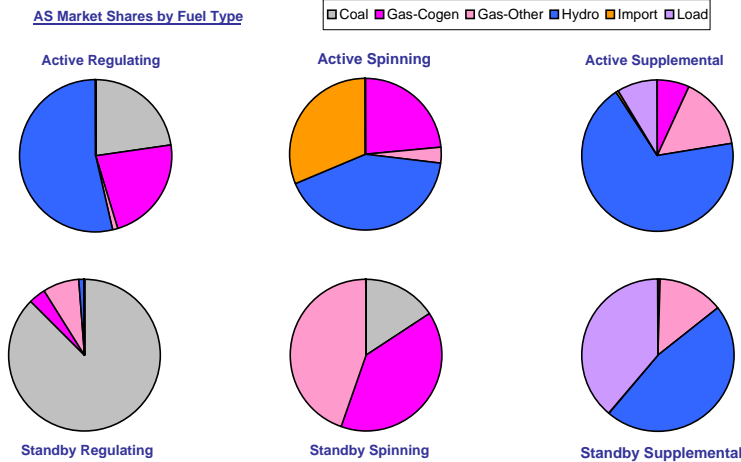
Active average off-peak prices were mostly lower and averaged \$26.83/MWh, \$3.08/MWh and \$0.05/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.62/MWh for off-peak supplemental reserves to \$44.89/MWh for on-peak spinning reserves.

Weekly average premium prices ranged from \$1.00/MWh for off-peak supplemental reserves up to \$2.60/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 53.7%. In the active spinning reserve market, hydro units had the leading market share with 41.6% while in the active supplemental reserve market, hydro units dominated with a 68.2% market share.

Coal units dominated the standby regulating reserve market with a 87.4% market share. Leading market share in the standby spinning market was held by gas-other units with a 44.6% market share. In the standby supplemental reserve market, hydro units had the leading market share with 46.9%.

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.