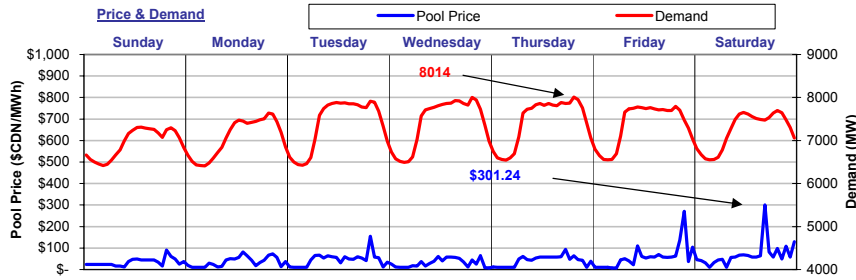


# The Market Monitor

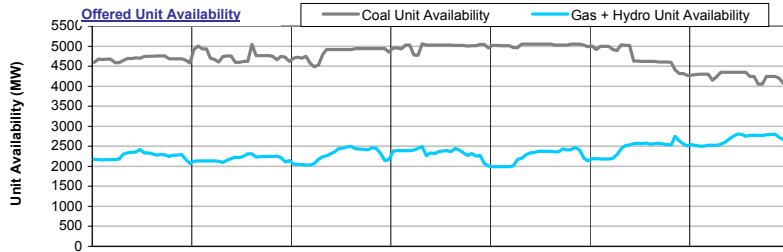
WATCHING THE MARKET : your fact source

Week Ending October 16, 2004

## Weekly Highlights

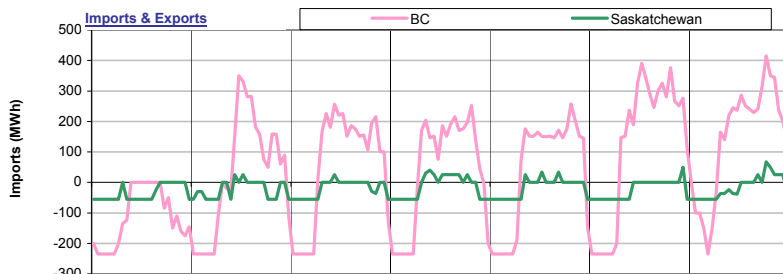


For the week ending October 16, 2004, **Pool Price** averaged \$45.53/MWh and ranged from a minimum of 7.09/MWh in HE24 on Wednesday to a maximum of \$301.24/MWh in HE17 on Saturday. **Demand** reached a high of 8014 MW in HE20 on Thursday and a low of 6414 MW in HE05 on Monday. Average demand for the week was 7272MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.21.

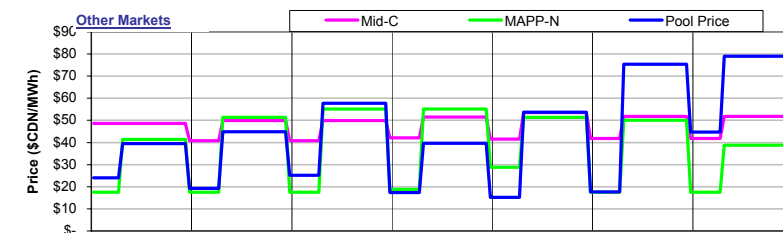


**Coal Unit Availability** averaged 4752 MW last week. This is an equivalent availability of 86% (based on MCR). **Gas and Hydro Unit Availability** averaged 2349MW last week, which is an equivalent of 42% (based on MCR).

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

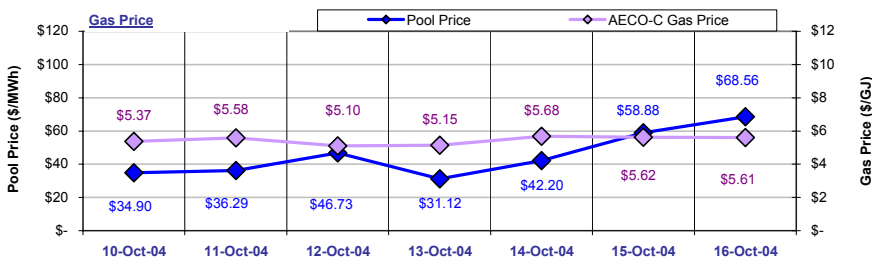


Alberta was a net importer from BC last week with total imports equal to 14,098MWh. Alberta was a net exporter to Saskatchewan last week with total exports equal to 17,384MWh. Overall, Alberta imported 31,482MWh of electricity last week.



**Pool Prices** were generally lower than prices in **Mid-C** and higher than prices in **MAPP-N** last week. **Mid-C** prices averaged \$51.37/MWh on-peak and \$42.48/MWh off-peak. **MAPP-N** prices averaged \$50.30/MWh on-peak and \$19.32/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.2524.

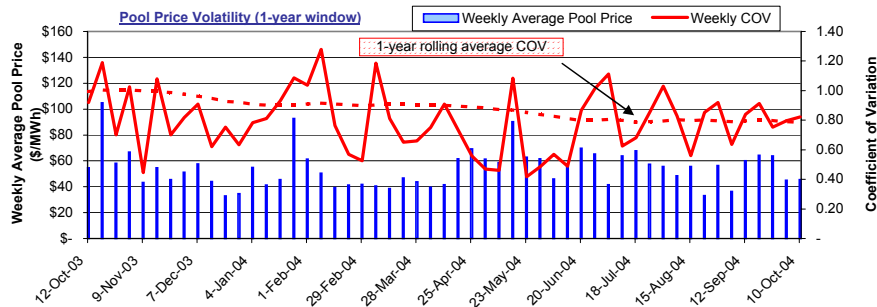
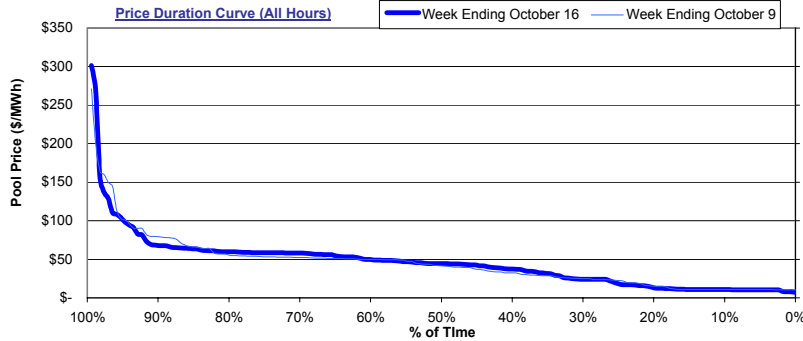
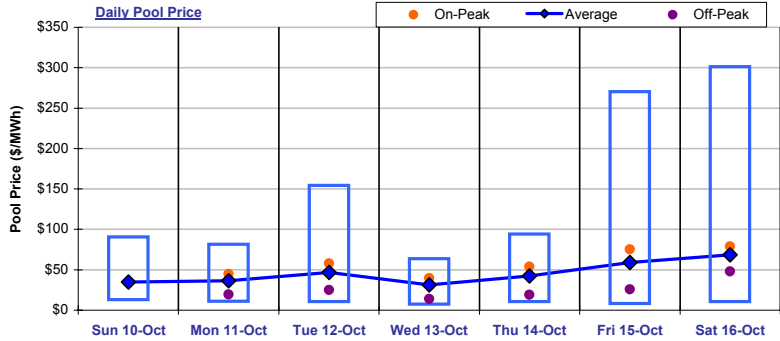


The average **AECO-C Gas Price** last week was \$5.44/GJ and ranged from a minimum of \$5.10/GJ to \$5.68/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 6.05GJ/MWh to a high of 12.22GJ/MWh. The average market heat rate for the week was 8.33GJ/MWh.

# Wholesale Market

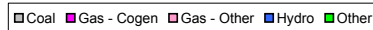
## Weekly Market Statistics

	Sunday 10-Oct	Monday 11-Oct	Tuesday 12-Oct	Wednesday 13-Oct	Thursday 14-Oct	Friday 15-Oct	Saturday 16-Oct	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 34.90	\$ 36.29	\$ 46.73	\$ 31.12	\$ 42.20	\$ 58.88	\$ 68.56	\$ 45.53	\$ 44.94	1.3%	\$ 53.86
On-Peak	NA	\$ 44.82	\$ 57.71	\$ 39.72	\$ 53.72	\$ 75.37	\$ 78.95	\$ 58.38	\$ 57.28	1.9%	\$ 63.37
Off-Peak	\$ 34.90	\$ 19.24	\$ 24.77	\$ 13.93	\$ 19.17	\$ 25.89	\$ 47.80	\$ 28.39	\$ 28.49	-0.4%	\$ 38.04
COV	0.51	0.61	0.66	0.62	0.55	0.95	0.82	0.67	0.71	-4.4%	
<b>Demand</b>											
Average	6,950	7,071	7,401	7,425	7,448	7,374	7,236	7,272	7,357	-1.2%	7,374
Minimum	6,415	6,414	6,426	6,493	6,545	6,551	6,549	6,485	6,514	-0.4%	6,017
Maximum	7,313	7,636	7,910	8,005	8,014	7,793	7,697	7,767	7,869	-1.3%	8,967
<b>Coal Unit Availability</b>											
Average	4,684	4,752	4,838	4,994	5,030	4,719	4,247	4,752	4,653	1.8%	4,858
Utilization	85%	86%	88%	90%	91%	85%	77%	86%	84%	1.8%	88%
<b>Gas and Hydro Unit Availability</b>											
Average	2,256	2,192	2,281	2,337	2,250	2,458	2,671	2,349	2,489	-2.5%	2,328
Utilization	47%	46%	48%	49%	47%	52%	56%	42%	44%	-2.5%	41%

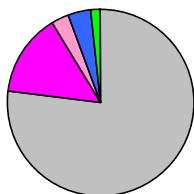


### Market Share Statistics

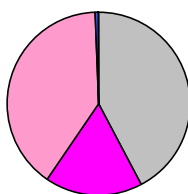
By Fuel Type:



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 \$58.38/MWh while the off-peak Pool price for the week was \$28.39/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 **October 16**, prices were at or below:

- \$20/MWh 25% of the time
- \$50/MWh 61% of the time
- \$100/MWh 95% 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.

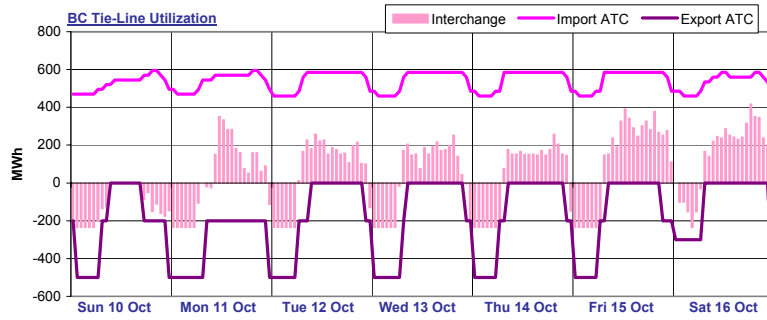
Pool price volatility increased for the week ending **October 16** from the previous week.

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

Last week, coal units were responsible for 77.1% of the generation in the province and set price 42.3% of the time. Gas-cogen units accounted for 14.5% of the generation and set price 17.2% of the time last week while other gas units made up 3.1% of generation and set price 39.9% of the time.

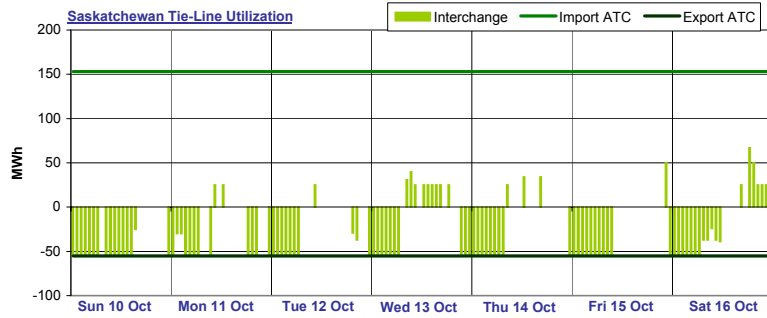
A total of 10 market participants set price last week. One market participants set price more than 20% of the time last week. The top price setter set price 35.3% of the time and the top five price setters set price a total of 86.4% of the time.

# Interties



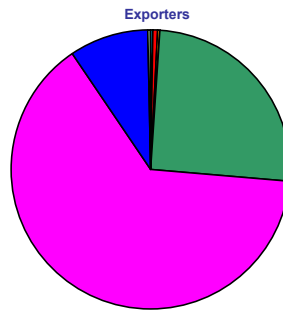
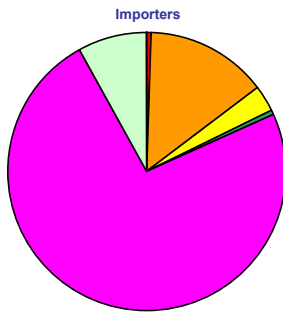
BC import capacity was 20% utilized last week while BC export capacity was 34% utilized. Energy was being imported into Alberta over the BC tie-line 57% of the time and exported out of Alberta over the BC tie-line 38% of the time last week. There was no activity on the BC tie-line 6% of the time last 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 3% utilized last week while Saskatchewan export capacity was 46% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 13% of the time and exported out of Alberta over the Saskatchewan tie-line 48% of the time last week. There was no activity on the Saskatchewan tie-line 39% of the time last week.

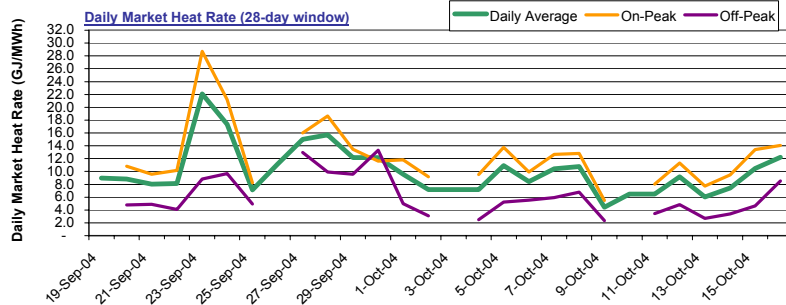
Tie-Line Market Shares



Last week, there were a total of 7 importers. The most active importer had a market share of 73.5% while the second most active importer had a market share of 14.2%. There were a total of 7 exporters last week. The most active exporter had a market share of 64.1% while the next largest exporter had a market share of 25.3%.

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 10.0 GJ/MWh and ranged from a low of 4.4 GJ/MWh to a high of 22.1 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 12.4 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.1 GJ/MWh.

Sparksreads

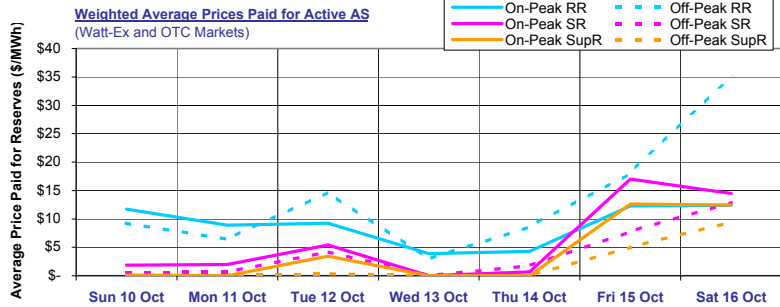
Date	AECO-C Gas Price (\$/GJ)	Daily Average		On-Peak			Off-Peak		
		Pool Price (\$/MWh)	Sparksread (\$/MWh)	Pool Price (\$/MWh)	Sparksread (\$/MWh)	Pool Price (\$/MWh)	Sparksread (\$/MWh)		
Sun 10 Oct	\$ 5.37	\$ 34.90	(5.37) (18.79)	NA	NA	\$ 34.90	(5.37) (18.79)		
Mon 11 Oct	\$ 5.58	\$ 36.29	(5.59) (19.55)	\$ 44.82	2.94 (11.02)	\$ 19.24	(22.65) (36.61)		
Tue 12 Oct	\$ 5.10	\$ 46.73	8.47 (4.28)	\$ 57.71	19.45 6.70	\$ 24.77	(13.49) (26.24)		
Wed 13 Oct	\$ 5.15	\$ 31.12	(7.49) (20.36)	\$ 39.72	1.11 (11.76)	\$ 13.93	(24.68) (37.55)		
Thu 14 Oct	\$ 5.68	\$ 42.20	(0.40) (14.60)	\$ 53.72	11.12 (3.08)	\$ 19.17	(23.43) (37.63)		
Fri 15 Oct	\$ 5.62	\$ 58.88	16.77 2.73	\$ 75.37	33.26 19.22	\$ 25.89	(16.22) (30.26)		
Sat 16 Oct	\$ 5.61	\$ 68.56	26.47 12.44	\$ 78.95	36.85 22.82	\$ 47.80	5.71 (8.32)		

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

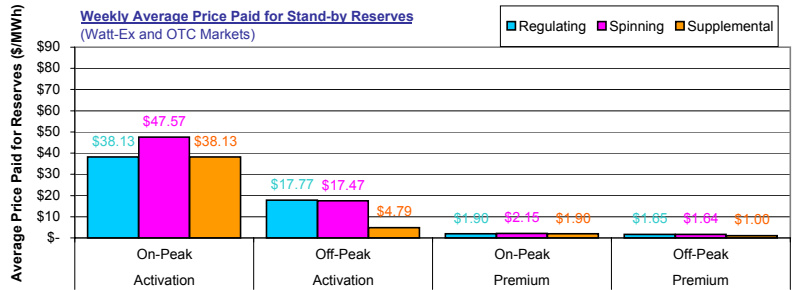
Off-peak sparksreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and all negative for a heat rate of 10.0 GJ/MWh.

# Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were **\$8.25/MWh**, **\$5.94/MWh** and **\$4.11/MWh** respectively for active **regulating**, **spinning** and **supplemental** reserves.

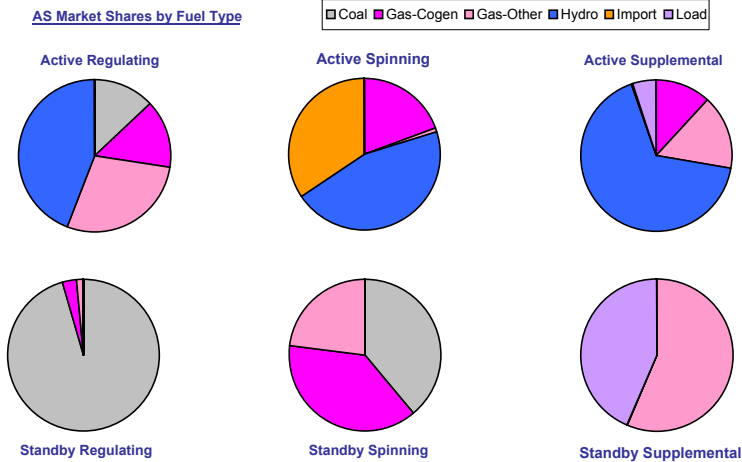
Active average off-peak prices were somewhat lower and averaged **\$13.18/MWh**, **\$3.99/MWh** and **\$2.14/MWh** for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from **\$4.79/MWh** for **off-peak supplemental** reserves to **\$47.57/MWh** for **on-peak spinning** reserves.

Weekly average premium prices ranged from **\$1.00/MWh** for **off-peak supplemental** reserves up to **\$2.15/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 **44.3%**. In the **active spinning** reserve market, **hydro** units had the leading market share with **45.3%** while in the **active supplemental** reserve market, **hydro** units dominated with a **66.8%** market share.

**Coal** units dominated the **standby regulating** reserve market with a **95.5%** market share. Leading market share in the **standby spinning** market was held by **gas** units with a **38.9%** market share. In the **standby supplemental** reserve market, **gas-other** units had the leading market share with **56.3%**.

## 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.