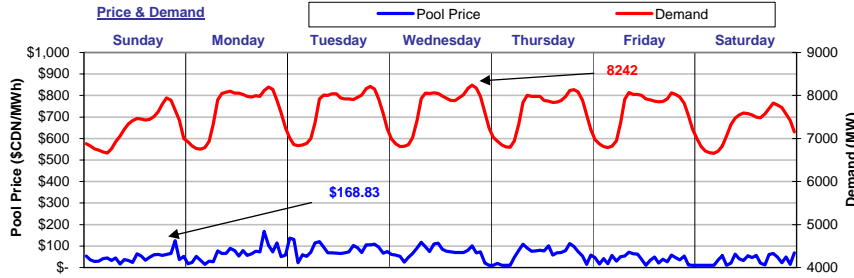


The Market Monitor

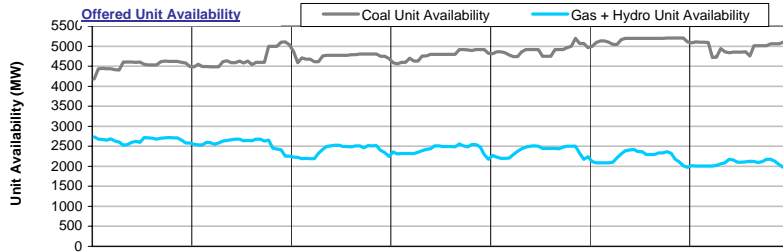
WATCHING THE MARKET : your fact source

Week Ending October 30, 2004

Weekly Highlights

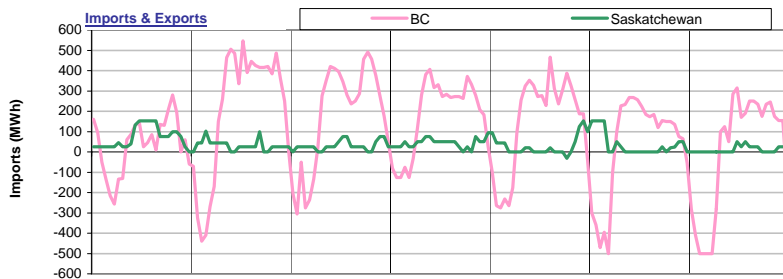


For the week ending October 30, 2004, **Pool Price** averaged \$57.64/MWh and ranged from a minimum of \$10.49/MWh in HE05 on Saturday to a maximum of \$168.83/MWh in HE19 on Monday. **Demand** reached a high of 8242 MW in HE20 on Wednesday and a low of 6659 MW in HE05 on Saturday. Average demand for the week was 7535MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.31.

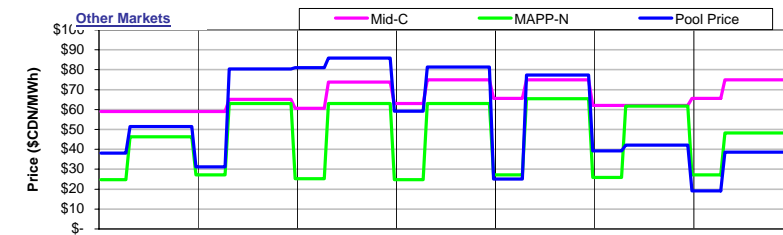


Coal Unit Availability averaged 4820 MW last week. This is an equivalent availability of 87% (based on MCR). **Gas and Hydro Unit Availability** averaged 2390MW last week, which is an equivalent of 42% (based on MCR).

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

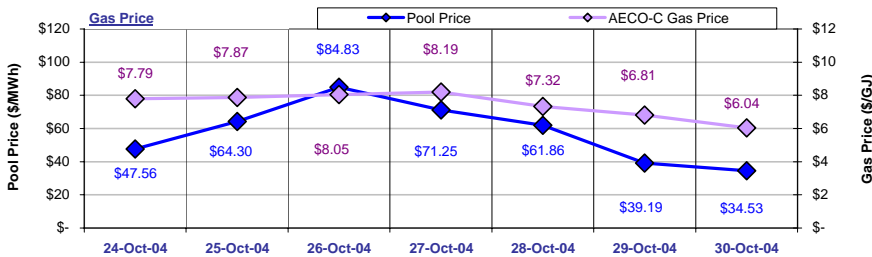


Alberta was a net importer from **BC** last week with total imports equal to 18,783MWh. Alberta was a net importer from **Saskatchewan** last week with total imports equal to 6,050MWh. Overall, Alberta imported 24,833MWh of electricity last week.



Pool Prices were generally lower than prices in **Mid-C** and higher than prices in **MAPP-N** last week. **Mid-C** prices averaged \$70.98/MWh on-peak and \$62.14/MWh off-peak. **MAPP-N** prices averaged \$60.72/MWh on-peak and \$26.02/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.235.

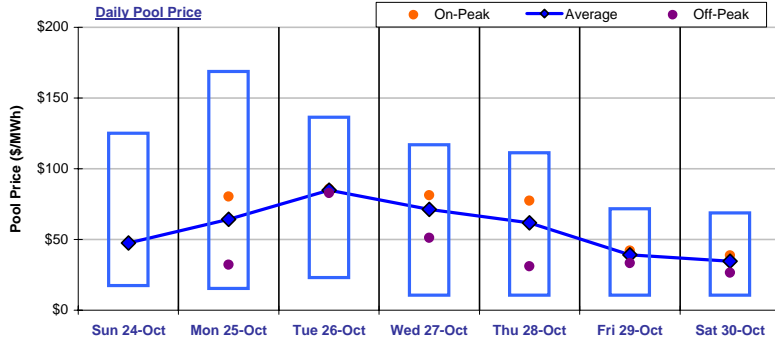


The average **AECO-C Gas Price** last week was \$7.44/GJ and ranged from a minimum of \$6.04/GJ to \$8.19/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 5.72GJ/MWh to a high of 10.53GJ/MWh. The average market heat rate for the week was 7.63GJ/MWh.

Wholesale Market

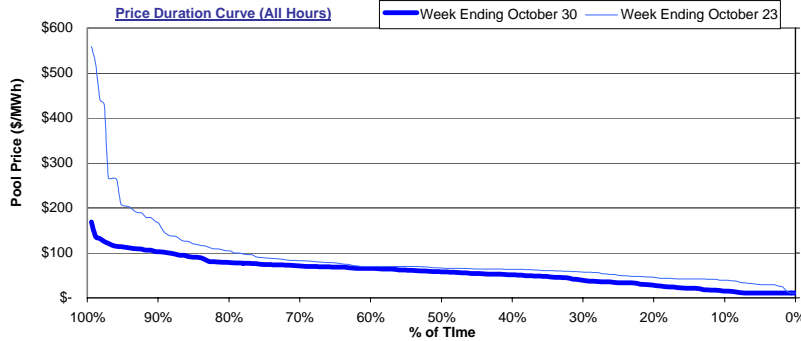
Weekly Market Statistics

	Sunday 24-Oct	Monday 25-Oct	Tuesday 26-Oct	Wednesday 27-Oct	Thursday 28-Oct	Friday 29-Oct	Saturday 30-Oct	Average	Last Week	% Change	YTD
Pool Price											
Average	\$ 47.56	\$ 64.30	\$ 84.83	\$ 71.25	\$ 61.86	\$ 39.19	\$ 34.53	\$ 57.64	\$ 87.65	-34.2%	\$ 54.72
On-Peak	NA	\$ 80.38	\$ 85.79	\$ 81.29	\$ 77.30	\$ 42.10	\$ 38.61	\$ 67.58	\$ 97.74	-30.9%	\$ 64.26
Off-Peak	\$ 47.56	\$ 32.14	\$ 82.90	\$ 51.16	\$ 30.96	\$ 33.37	\$ 26.38	\$ 44.40	\$ 74.21	-40.2%	\$ 39.00
COV	0.45	0.53	0.32	0.38	0.53	0.46	0.62	0.47	0.63	-24.7%	
Demand											
Average	7,246	7,654	7,655	7,668	7,616	7,607	7,302	7,535	7,514	0.3%	7,382
Minimum	6,667	6,754	6,837	6,816	6,796	6,792	6,659	6,760	6,705	0.8%	6,017
Maximum	7,940	8,195	8,211	8,242	8,140	8,071	7,827	8,089	8,081	0.1%	8,967
Coal Unit Availability											
Average	4,529	4,679	4,747	4,776	4,892	5,158	4,963	4,820	4,471		4,848
Utilization	82%	85%	86%	87%	89%	93%	90%	87%	81%	6.3%	88%
Gas and Hydro Unit Availability											
Average	2,656	2,567	2,397	2,423	2,382	2,232	2,074	2,390	2,666		2,338
Utilization	56%	54%	50%	51%	50%	47%	44%	42%	47%	-4.9%	41%



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 **\$67.58/MWh** while the **off-peak Pool price** for the week was **\$44.40/MWh**.

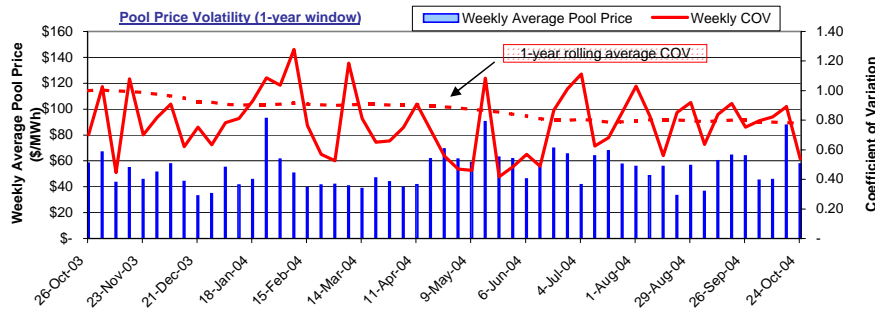
Note: Sundays and most statutory holidays are defined as off-peak.



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 30**, prices were at or below:

- \$20/MWh 13% of the time
- \$50/MWh 38% of the time
- \$100/MWh 88% of the time
- \$250/MWh 100% of the time
- \$500/MWh 100% of the time



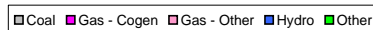
The chart plots average weekly **Pool Price** and the **Coefficient of Variation (COV)** of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility **decreased** for the week ending **October 30** from the previous week.

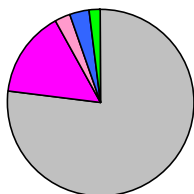
Pool price volatility also moved **below** the 1-year rolling average COV value.

Market Share Statistics

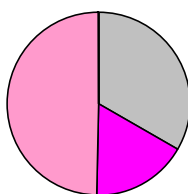
By Fuel Type:



Weekly Generation by Fuel Type



Weekly Price Setting by Fuel Type



By Submitting Customer:

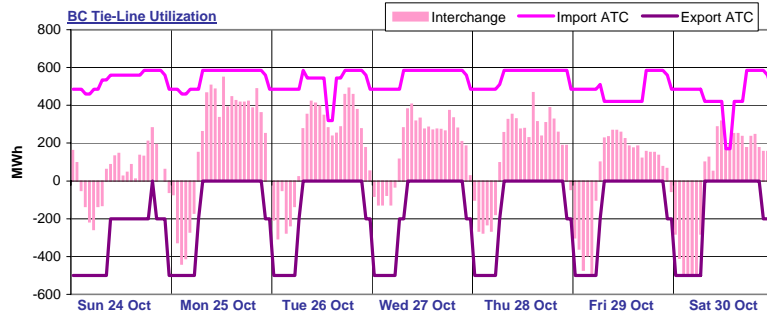
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for **76.8%** of the generation in the province and set price **33.4%** of the time. **Gas-cogen** units accounted for **15.0%** of the generation and set price **16.9%** of the time last week while **other gas** units made up **3.0%** of generation and set price **49.7%** of the time.

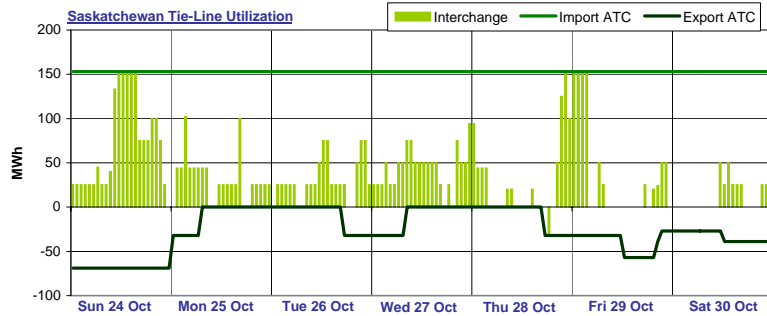
A total of **11** market participants set price last week. One market participants set price more than **20%** of the time last week. The top price setter set price **27.7%** of the time and the top five price setters set price a total of **73.6%** of the time.

Interties



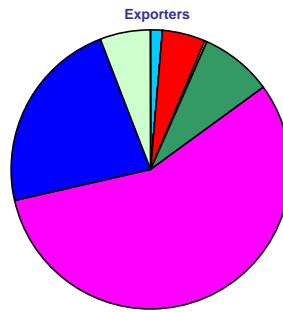
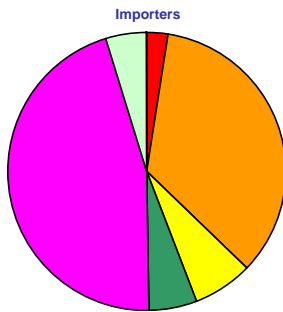
BC import capacity was 34% utilized last week while BC export capacity was 29% utilized. Energy was being imported into Alberta over the BC tie-line 71% of the time and exported out of Alberta over the BC tie-line 28% of the time last week. There was no activity on the BC tie-line 1% of the time last 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 24% utilized last week while Saskatchewan export capacity was 1% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 68% of the time and exported out of Alberta over the Saskatchewan tie-line 1% of the time last week. There was no activity on the Saskatchewan tie-line 32% of the time last week.

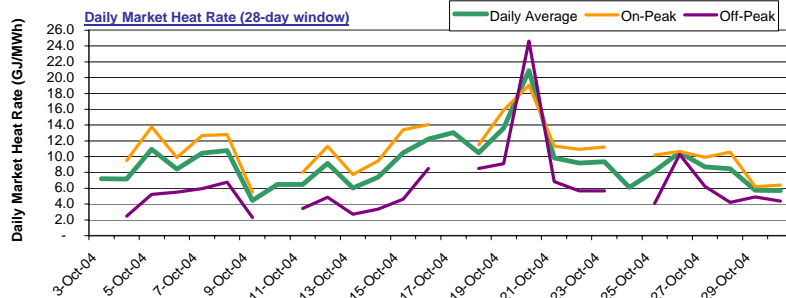
Tie-Line Market Shares



Last week, there were a total of 7 importers. The most active importer had a market share of 45.6% while the second most active importer had a market share of 34.8%. There were a total of 7 exporters last week. The most active exporter had a market share of 56.6% while the next largest exporter had a market share of 22.7%.

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 9.2 GJ/MWh and ranged from a low of 4.4 GJ/MWh to a high of 20.9 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 10.9 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.3 GJ/MWh.

Sparksreads

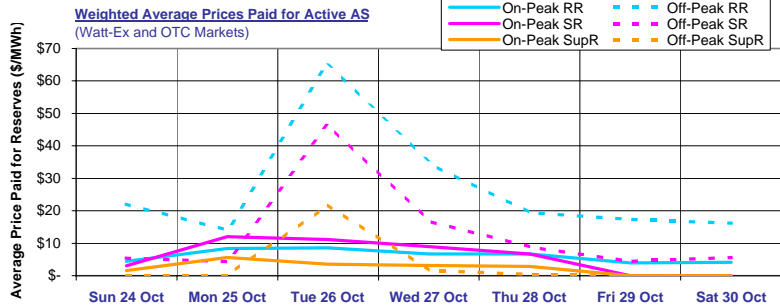
Date	AECO-C Gas Price (\$/GJ)	Daily Average				On-Peak			Off-Peak		
		Pool Price (\$/MWh)	Sparksread (\$/MWh)		Pool Price (\$/MWh)	Sparksread (\$/MWh)		Pool Price (\$/MWh)	Sparksread (\$/MWh)		
			HR=7.5	HR=10.0		HR=7.5	HR=10.0		HR=7.5	HR=10.0	
Sun 24 Oct	\$ 7.79	\$ 47.56	(10.86)	(30.33)	NA	NA	NA	\$ 47.56	(10.86)	(30.33)	
Mon 25 Oct	\$ 7.87	\$ 64.30	5.24	(14.45)	\$ 80.38	21.32	1.63	\$ 32.14	(26.92)	(46.60)	
Tue 26 Oct	\$ 8.05	\$ 84.83	24.43	4.29	\$ 85.79	25.39	5.26	\$ 82.90	22.50	2.37	
Wed 27 Oct	\$ 8.19	\$ 71.25	9.81	(10.67)	\$ 81.29	19.85	(0.63)	\$ 51.16	(10.28)	(30.76)	
Thu 28 Oct	\$ 7.32	\$ 61.86	6.94	(11.36)	\$ 77.30	22.39	4.09	\$ 30.96	(23.96)	(42.26)	
Fri 29 Oct	\$ 6.81	\$ 39.19	(11.91)	(28.94)	\$ 42.10	(9.00)	(26.03)	\$ 33.37	(17.73)	(34.77)	
Sat 30 Oct	\$ 6.04	\$ 34.53	(10.77)	(25.87)	\$ 38.61	(6.69)	(21.80)	\$ 26.38	(18.92)	(34.02)	

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 positive for a heat rate of 10.0 GJ/MWh.

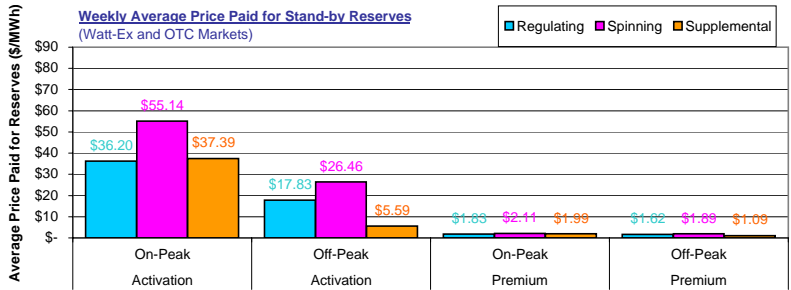
Off-peak sparksreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

Ancillary Services Market



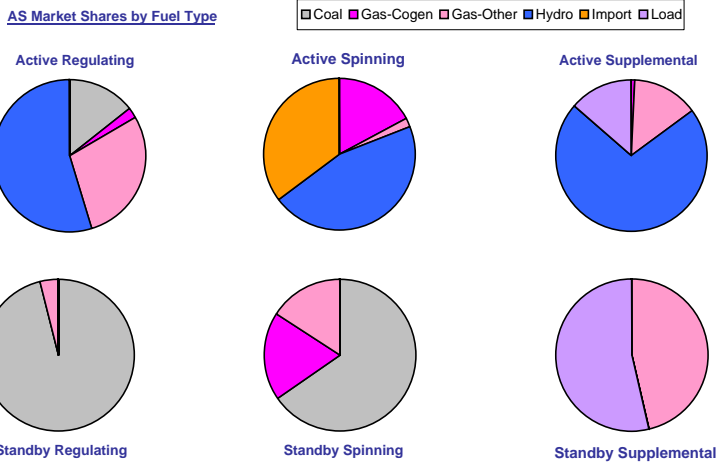
Average on-peak prices paid for active ancillary services last week were \$6.12/MWh, \$6.06/MWh and \$2.44/MWh respectively for active **regulating**, **spinning** and **supplemental** reserves.

Active average off-peak prices were somewhat higher and averaged \$26.80/MWh, \$13.19/MWh and \$3.43/MWh for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$5.59/MWh for **off-peak supplemental** reserves to \$55.14/MWh for **on-peak spinning** reserves.

Weekly average premium prices ranged from \$1.09/MWh for **off-peak supplemental** reserves up to \$2.11/MWh for **on-peak spinning** reserves.



Last week **hydro** units had the largest market share in the **active regulating** reserve market with 54.8%. In the **active spinning** reserve market, **hydro** units had the leading market share with 45.6% while in the **active supplemental** reserve market, **hydro** units dominated with a 71.7% market share.

Coal units dominated the **standby regulating** reserve market with a 96.2% market share. Leading market share in the **standby spinning** market was held by gas units with a 65.3% market share. In the **standby supplemental** reserve market, gas units had the leading market share with 53.7%.

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.