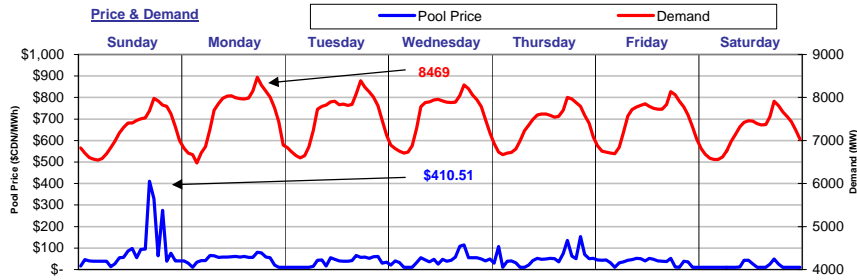


The Market Monitor

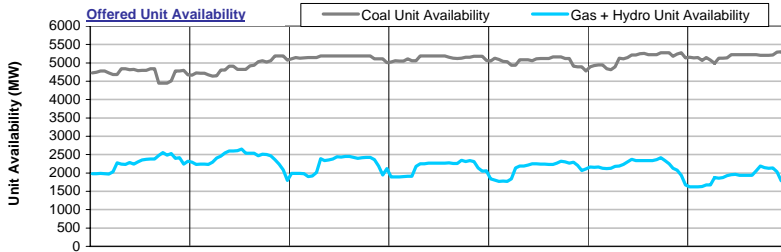
WATCHING THE MARKET : your fact source

Week Ending November 13, 2004

Weekly Highlights

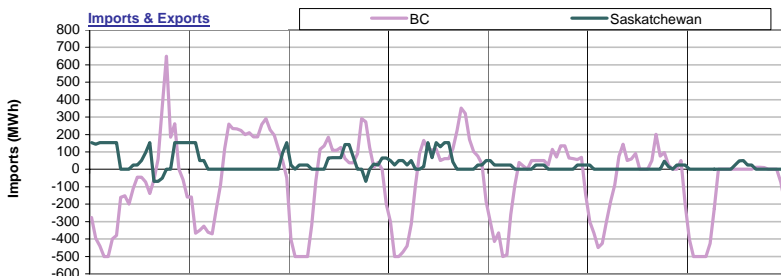


For the week ending November 13, 2004, **Pool Price** averaged \$46.16/MWh and ranged from a minimum of \$10.49/MWh in HE24 on Saturday to a maximum of \$410.51/MWh in HE17 on Sunday. **Demand** reached a high of 8469 MW in HE18 on Monday and a low of 6480 MW in HE04 on Monday. Average demand for the week was 7425MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.12.

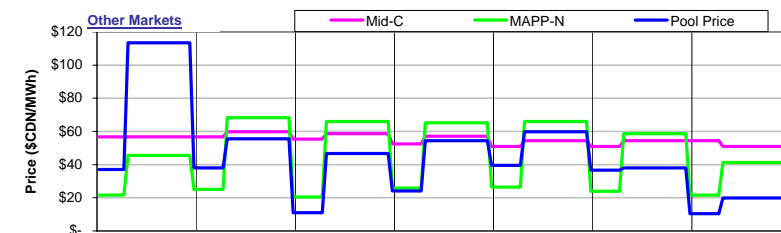


Coal Unit Availability averaged 5037 MW last week. This is an equivalent availability of 91% (based on MCR). **Gas and Hydro Unit Availability** averaged 2181MW last week, which is an equivalent of 39% (based on MCR).

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

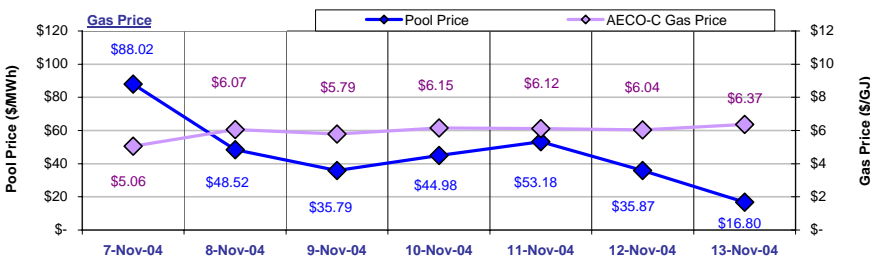


Alberta was a net exporter from **BC** last week with total exports equal to 10,050MWh. Alberta was a net importer from Saskatchewan last week with total imports equal to 5,204MWh. Overall, Alberta exported 4,846MWh of electricity last week.



Pool Prices were generally lower than prices in **Mid-C** and lower than prices in **MAPP-N** last week. **Mid-C** prices averaged \$55.86/MWh on-peak and \$53.94/MWh off-peak. **MAPP-N** prices averaged \$60.90/MWh on-peak and \$23.53/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.198.

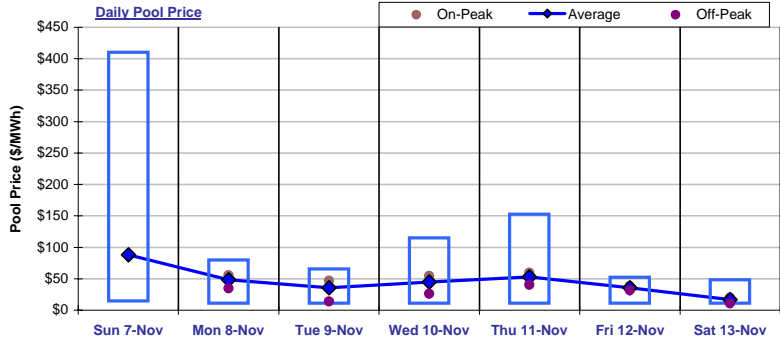


The average **AECO-C Gas Price** last week was \$5.94/GJ and ranged from a minimum of \$5.06/GJ to \$6.37/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 2.64GJ/MWh to a high of 17.40GJ/MWh. The average market heat rate for the week was 8.02GJ/MWh.

Wholesale Market

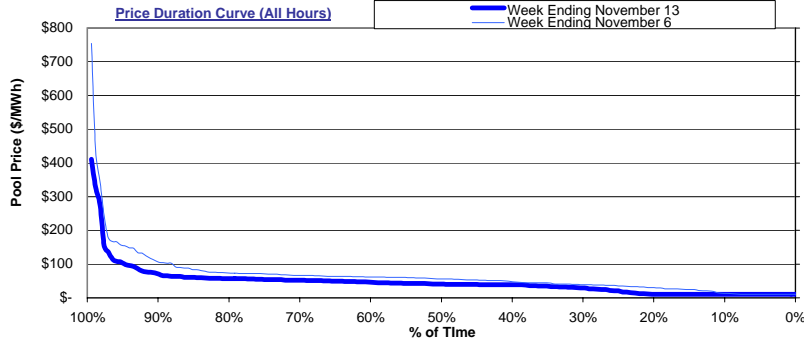
Weekly Market Statistics

	Sunday 7-Nov	Monday 8-Nov	Tuesday 9-Nov	Wednesday 10-Nov	Thursday 11-Nov	Friday 12-Nov	Saturday 13-Nov	Average	Last Week	% Change	YTD
Pool Price											
Average	\$ 88.02	\$ 48.52	\$ 35.79	\$ 44.98	\$ 53.18	\$ 35.87	\$ 16.80	\$ 46.16	\$ 65.71	-29.7%	\$ 54.77
On-Peak	NA	\$ 55.56	\$ 46.73	\$ 54.48	\$ 59.78	\$ 38.08	\$ 19.95	\$ 45.76	\$ 79.13	-42.2%	\$ 64.18
Off-Peak	\$ 88.02	\$ 34.44	\$ 13.92	\$ 25.98	\$ 39.99	\$ 31.44	\$ 10.49	\$ 46.70	\$ 47.81	-2.3%	\$ 38.97
COV	1.15	0.41	0.54	0.56	0.66	0.40	0.72	0.63	0.73	-13.2%	
Demand											
Average	7,220	7,592	7,554	7,589	7,358	7,467	7,196	7,425	7,528	-1.4%	7,386
Minimum	6,542	6,480	6,597	6,706	6,668	6,696	6,557	6,607	6,719	-1.7%	6,017
Maximum	7,980	8,469	8,389	8,296	8,001	8,137	7,915	8,170	8,244	-0.9%	8,967
Coal Unit Availability											
Average	4,725	4,889	5,158	5,134	5,050	5,123	5,180	5,037	4,919	2.1%	4,854
Utilization	86%	89%	93%	93%	91%	93%	94%	91%	89%	2.1%	88%
Gas and Hydro Unit Availability											
Average	2,267	2,394	2,238	2,157	2,117	2,209	1,889	2,181	2,312	-2.3%	2,334
Utilization	48%	50%	47%	45%	44%	46%	40%	39%	41%	-2.3%	41%



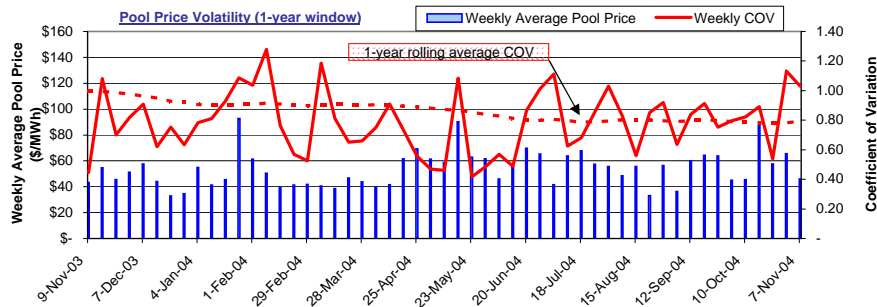
The Daily Pool Price graph plots the daily range in hourly Pool price (defined by the blue box) along with the daily average and daily on and off-peak prices. The on-peak Pool price for the week was \$45.76/MWh while the off-peak Pool price for the week was \$46.70/MWh.

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 November 13, prices were at or below:

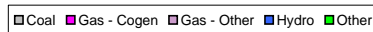
- \$20/MWh 24% of the time
- \$50/MWh 66% of the time
- \$100/MWh 95% of the time
- \$250/MWh 98% of the time
- \$500/MWh 100% of the time



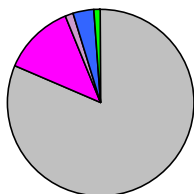
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility. Pool price volatility decreased for the week ending November 13 from the previous week. Pool price volatility also moved above the 1-year rolling average COV value.

Market Share Statistics

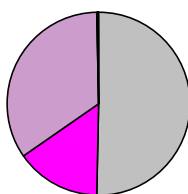
By Fuel Type:



Weekly Generation by Fuel Type



Weekly Price Setting by Fuel Type



By Submitting Customer:

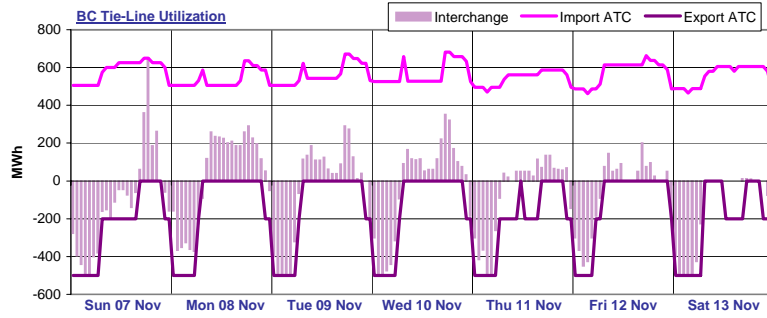
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 81.3% of the generation in the province and set price 50.3% of the time. Gas-cogen units accounted for 12.5% of the generation and set price 15.0% of the time last week while other gas units made up 1.5% of generation and set price 34.4% of the time.

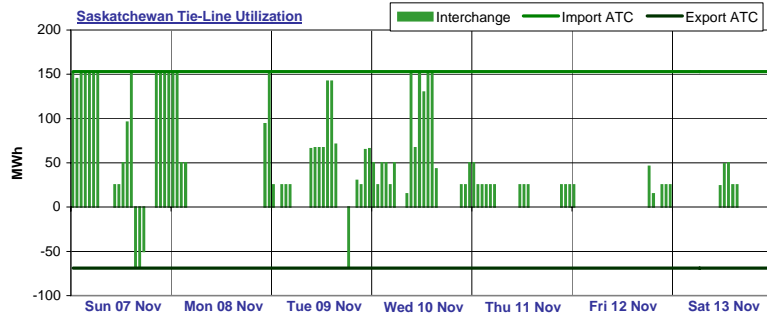
A total of 10 market participants set price last week. Two market participants set price more than 20% of the time last week. The top price setter set price 32.5% of the time and the top five price setters set price a total of 87.4% of the time.

Interties



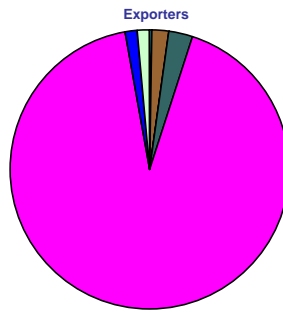
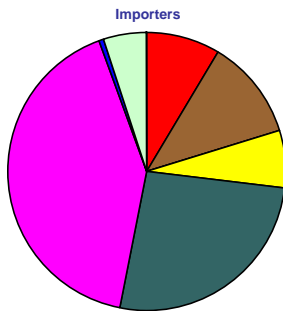
BC import capacity was 11% utilized last week while BC export capacity was 58% utilized. Energy was being imported into Alberta over the BC tie-line 48% of the time and exported out of Alberta over the BC tie-line 40% of the time last week. There was no activity on the BC tie-line 12% of the time last 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 21% utilized last week while Saskatchewan export capacity was 2% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 46% 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 52% of the time last week.

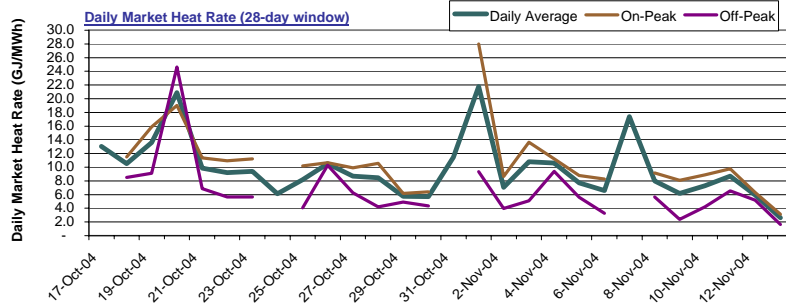
Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 41.5% while the second most active importer had a market share of 26.1%. There were a total of 6 exporters last week. The most active exporter had a market share of 92.3% while the next largest exporter had a market share of 2.8%.

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 9.7 GJ/MWh and ranged from a low of 2.6 GJ/MWh to a high of 21.8 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 10.7 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.5 GJ/MWh.

Sparksreads

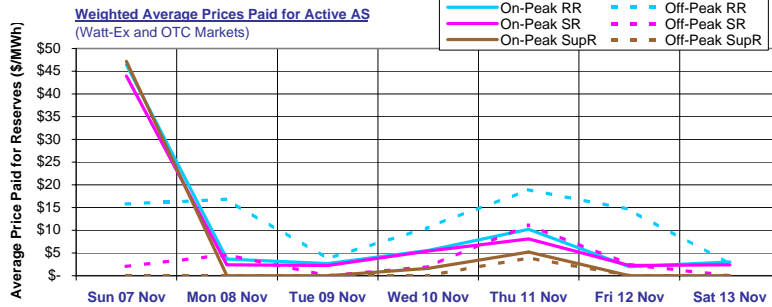
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak		
		Pool Price (\$/MWh)	Sparksread (\$/MWh)		Pool Price (\$/MWh)	Sparksread (\$/MWh)		Pool Price (\$/MWh)	Sparksread (\$/MWh)	
			HR=7.5	HR=10.0		HR=7.5	HR=10.0		HR=7.5	HR=10.0
Sun 07 Nov	\$ 5.06	\$ 88.02	50.08	37.44	NA	NA	NA	\$ 88.02	50.08	37.44
Mon 08 Nov	\$ 6.07	\$ 48.52	3.01	(12.15)	\$ 55.56	10.05	(5.11)	\$ 34.44	(11.07)	(26.23)
Tue 09 Nov	\$ 5.79	\$ 35.79	(7.63)	(22.10)	\$ 46.73	3.31	(11.17)	\$ 13.92	(29.50)	(43.98)
Wed 10 Nov	\$ 6.15	\$ 44.98	(1.15)	(16.53)	\$ 54.48	8.35	(7.03)	\$ 25.98	(20.15)	(35.53)
Thu 11 Nov	\$ 6.12	\$ 53.18	7.28	(8.02)	\$ 59.78	13.88	(1.42)	\$ 39.99	(5.92)	(21.22)
Fri 12 Nov	\$ 6.04	\$ 35.87	(9.47)	(24.58)	\$ 38.08	(7.25)	(22.37)	\$ 31.44	(13.89)	(29.00)
Sat 13 Nov	\$ 6.37	\$ 16.80	(30.98)	(46.91)	\$ 19.95	(27.83)	(43.75)	\$ 10.49	(37.29)	(53.21)

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 mostly positive for a heat rate of 7.5 GJ/MWh and all negative for a heat rate of 10.0 GJ/MWh.

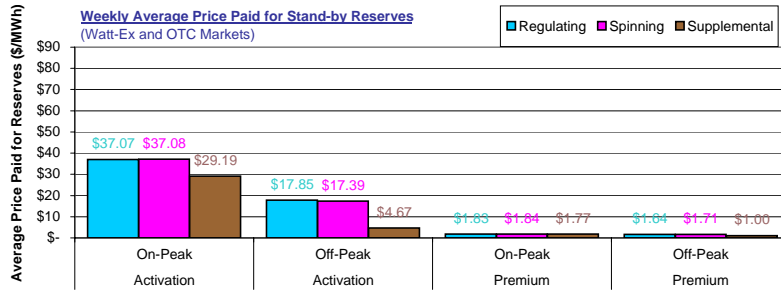
Off-peak sparksreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$10.30/MWh, \$9.32/MWh and \$7.47/MWh respectively for active **regulating**, **spinning** and **supplemental** reserves.

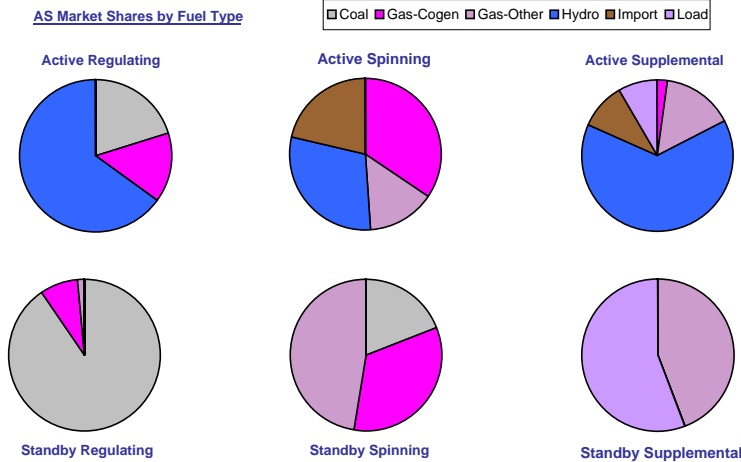
Active average off-peak prices were somewhat lower and averaged \$11.96/MWh, \$3.19/MWh and \$0.56/MWh for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.67/MWh for **off-peak supplemental** reserves to \$37.08/MWh for **on-peak spinning** reserves.

Weekly average premium prices ranged from \$1.00/MWh for **off-peak supplemental** reserves up to \$1.84/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 65.1%. In the **active spinning** reserve market, **gas-cogen** units had the leading market share with 34.4% while in the **active supplemental** reserve market, **hydro** units dominated with a 64.1% market share.

Coal units dominated the **standby regulating** reserve market with a 90.5% market share. Leading market share in the **standby spinning** market was held by **gas-other** units with a 47.4% market share. In the **standby supplemental** reserve market, **load** units had the leading market share with 55.9%.

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.