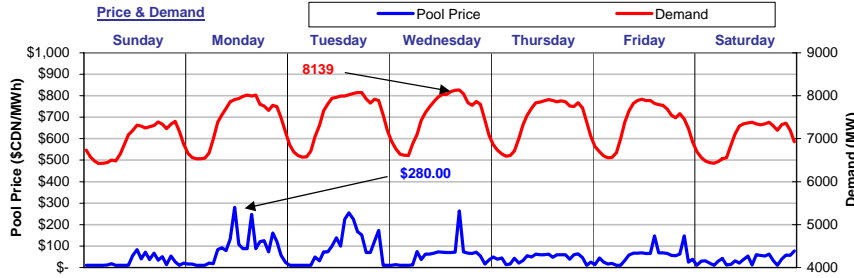


The Market Monitor

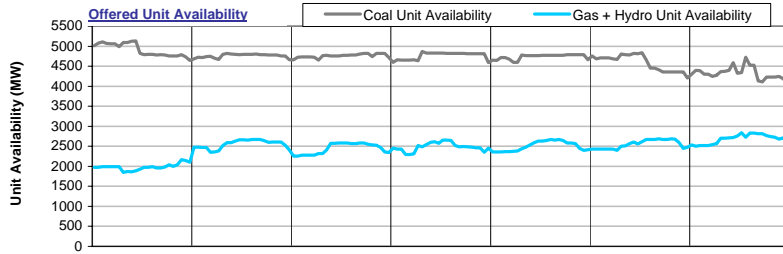
WATCHING THE MARKET : your fact source

Week Ending September 4, 2004

Weekly Highlights

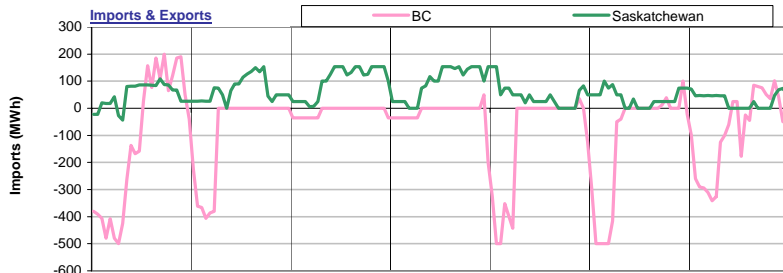


For the week ending September 4, 2004, **Pool Price** averaged \$56.50/MWh and ranged from a minimum of \$10.35/MWh in HE05 on Tuesday to a maximum of \$280.00/MWh in HE12 on Monday. **Demand** reached a high of 8139 MW in HE17 on Wednesday and a low of 6423 MW in HE04 on Sunday. Average demand for the week was 7317MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.45.

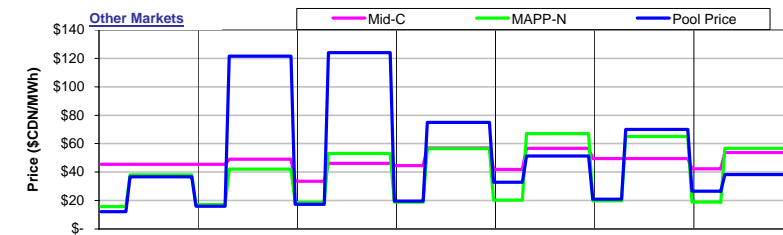


Coal Unit Availability averaged 4691 MW last week. This is an equivalent availability of 85% (based on MCR). **Gas and Hydro Unit Availability** averaged 2458MW last week, which is an equivalent of 44% (based on MCR).

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

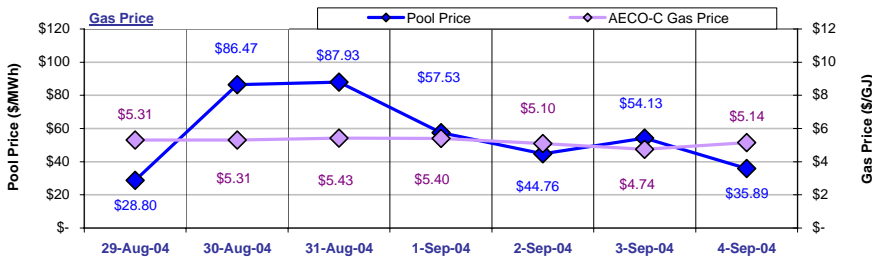


Alberta was a net exporter to **BC** last week with total exports equal to 12,987MWh. Alberta was a net importer from **Saskatchewan** last week with total imports equal to 10,296MWh. Overall, Alberta exported 2,691MWh of electricity last week.



Pool Prices were generally higher than prices in **Mid-C** and higher than prices in **MAPP-N** last week. **Mid-C** prices averaged \$52.09/MWh on-peak and \$43.21/MWh off-peak. **MAPP-N** prices averaged \$56.73/MWh on-peak and \$18.48/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.3133.

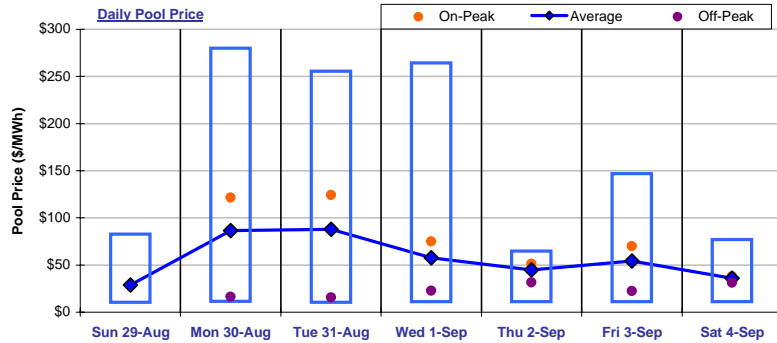


The average **AECO-C Gas Price** last week was \$5.20/GJ and ranged from a minimum of \$4.74/GJ to \$5.43/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 5.43GJ/MWh to a high of 16.27GJ/MWh. The average market heat rate for the week was 10.82GJ/MWh.

Wholesale Market

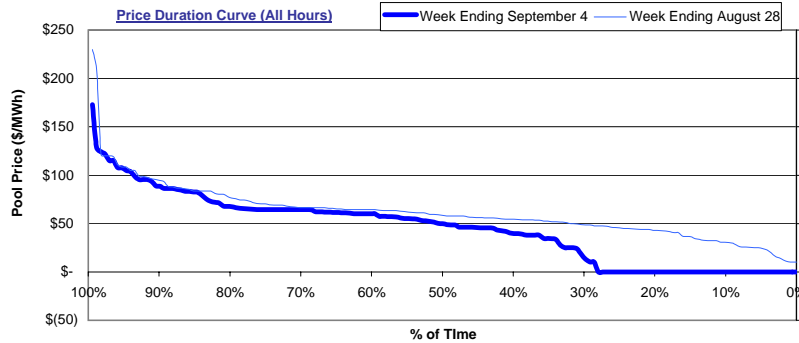
Weekly Market Statistics

	Sunday 29-Aug	Monday 30-Aug	Tuesday 31-Aug	Wednesday 1-Sep	Thursday 2-Sep	Friday 3-Sep	Saturday 4-Sep	Average	Last Week	% Change	YTD
Pool Price											
Average	\$ 28.80	\$ 86.47	\$ 87.93	\$ 57.53	\$ 44.76	\$ 54.13	\$ 35.89	\$ 56.50	\$ 33.24	70.0%	\$ 54.08
On-Peak	NA	\$ 121.51	\$ 124.10	\$ 74.93	\$ 51.40	\$ 69.92	\$ 38.17	\$ 80.00	\$ 37.26	114.7%	\$ 63.16
Off-Peak	\$ 28.80	\$ 16.40	\$ 15.61	\$ 22.72	\$ 31.46	\$ 22.55	\$ 31.32	\$ 25.16	\$ 27.89	-9.8%	\$ 38.79
COV	0.80	0.82	0.89	0.89	0.38	0.66	0.55	0.71	0.75	-4.7%	
Demand											
Average	6,960	7,427	7,512	7,519	7,426	7,362	7,011	7,317	7,294	0.3%	7,380
Minimum	6,423	6,533	6,569	6,611	6,592	6,558	6,426	6,530	6,524	0.1%	6,017
Maximum	7,409	8,016	8,078	8,139	7,909	7,919	7,383	7,836	7,811	0.3%	8,967
Coal Unit Availability											
Average	4,909	4,762	4,759	4,762	4,736	4,588	4,324	4,691	4,943	-4.6%	4,900
Utilization	89%	86%	86%	86%	86%	83%	78%	85%	90%	-4.6%	89%
Gas and Hydro Unit Availability											
Average	1,984	2,553	2,444	2,488	2,506	2,552	2,681	2,458	2,249	3.7%	2,301
Utilization	42%	54%	51%	52%	53%	54%	56%	43%	40%	3.7%	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 **\$80.00/MWh** while the **off-peak Pool price** for the week was **\$25.16/MWh**.

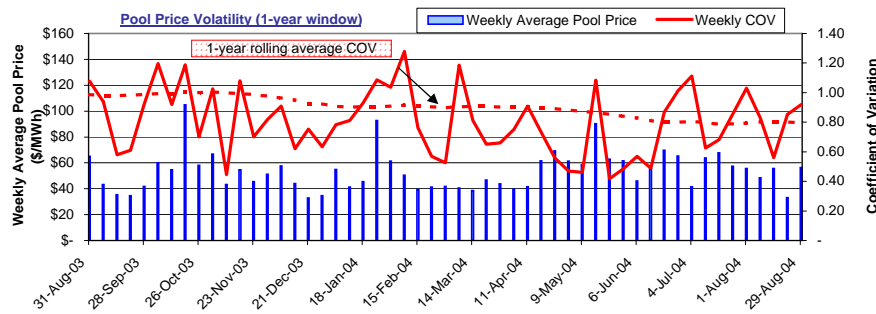
Note: Sundays and most statutory holidays are defined as off-peak.



The price duration curves show the % of time that prices were at or below a certain value during the week.

For the week ending **September 4**, prices were at or below:

- \$20/MWh 30% of the time
- \$50/MWh 50% of the time
- \$100/MWh 93% of the time
- \$250/MWh 99% of the time
- \$500/MWh 100% of the time



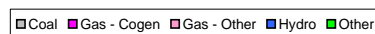
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility **increased** for the week ending **September 4** from the previous week.

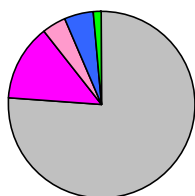
Pool price volatility also moved **above** the 1-year rolling average COV value.

Market Share Statistics

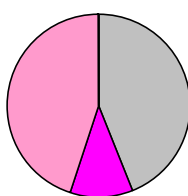
By Fuel Type:



Weekly Generation by Fuel Type

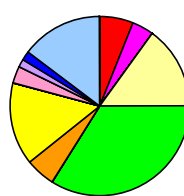


Weekly Price Setting by Fuel Type



By Submitting Customer:

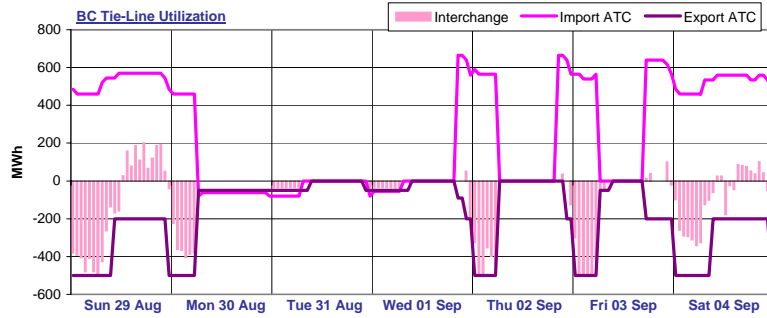
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for **76.1%** of the generation in the province and set price **43.8%** of the time. **Gas-cogen** units accounted for **13.5%** of the generation and set price **11.2%** of the time last week while **other gas** units made up **4.0%** of generation and set price **45.1%** of the time.

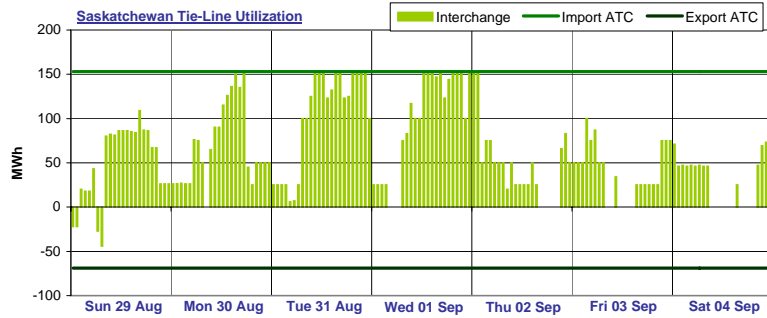
A total of **10** market participants set price last week. One market participants set price more than **20%** of the time last week. The top price setter set price **33.9%** of the time and the top five price setters set price a total of **84.9%** of the time.

Interties



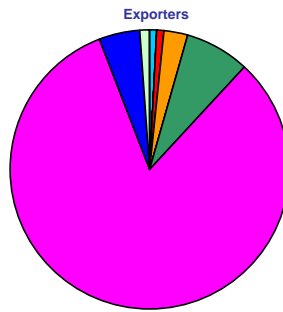
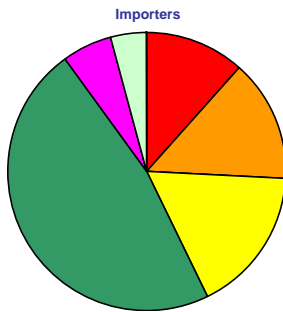
BC import capacity was 3% utilized last week while BC export capacity was 37% utilized. Energy was being imported into Alberta over the BC tie-line 15% of the time and exported out of Alberta over the BC tie-line 39% of the time last week. There was no activity on the BC tie-line 46% of the time last 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 41% utilized last week while Saskatchewan export capacity was 1% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 83% 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 15% of the time last week.

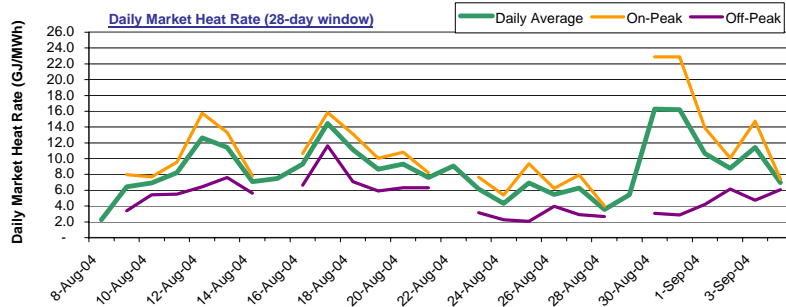
Tie-Line Market Shares



Last week, there were a total of 6 importers. The most active importer had a market share of 47.2% while the second most active importer had a market share of 17.1%. There were a total of 7 exporters last week. The most active exporter had a market share of 82.2% while the next largest exporter had a market share of 7.5%.

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 8.6 GJ/MWh and ranged from a low of 2.3 GJ/MWh to a high of 16.3 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 11.0 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 5.1 GJ/MWh.

Sparksreads

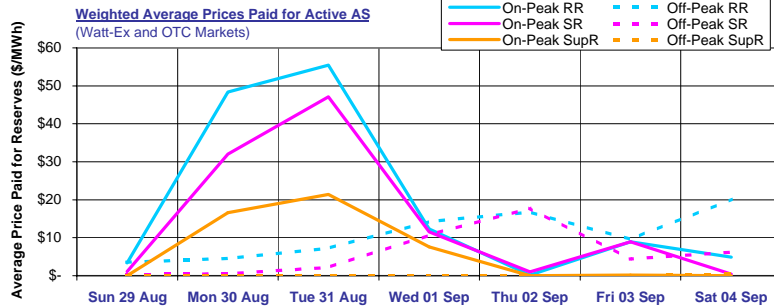
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak		
		Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0
Sun 29 Aug	\$ 5.31	\$ 28.80	(10.99)	(24.25)	NA	NA	NA	\$ 28.80	(10.99)	(24.25)
Mon 30 Aug	\$ 5.31	\$ 86.47	46.62	33.33	\$ 121.51	81.65	68.37	\$ 16.40	(23.45)	(36.74)
Tue 31 Aug	\$ 5.43	\$ 87.93	47.23	33.66	\$ 124.10	83.39	69.82	\$ 15.61	(25.09)	(38.66)
Wed 01 Sep	\$ 5.40	\$ 57.53	17.04	3.54	\$ 74.93	34.44	20.94	\$ 22.72	(17.77)	(31.27)
Thu 02 Sep	\$ 5.10	\$ 44.76	6.50	(6.26)	\$ 51.40	13.14	0.39	\$ 31.46	(6.80)	(19.55)
Fri 03 Sep	\$ 4.74	\$ 54.13	18.57	6.72	\$ 69.92	34.36	22.51	\$ 22.55	(13.01)	(24.87)
Sat 04 Sep	\$ 5.14	\$ 35.89	(2.68)	(15.53)	\$ 38.17	(0.39)	(13.25)	\$ 31.32	(7.24)	(20.10)

Daily average 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.

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.

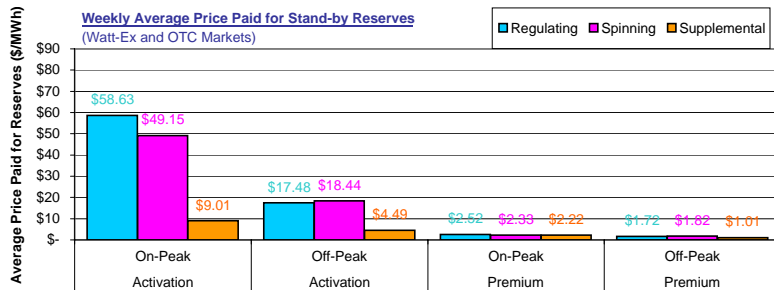
Off-peak sparksreads last week were all negative for a heat rate of 7.5 GJ/MWh and all negative for a heat rate of 10.0 GJ/MWh.

Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$19.23/MWh, \$15.10/MWh and \$6.79/MWh respectively for active regulating, spinning and supplemental reserves.

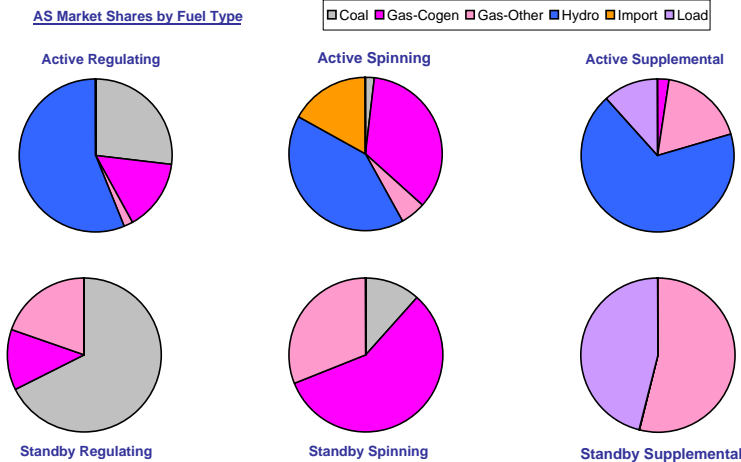
Active average off-peak prices were somewhat lower and averaged \$10.91/MWh, \$5.96/MWh and \$0.07/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$4.49/MWh for off-peak supplemental reserves to \$58.63/MWh for on-peak regulating reserves.

Weekly average premium prices ranged from \$1.01/MWh for off-peak supplemental reserves up to \$2.52/MWh for on-peak regulating reserves.

AS Market Shares by Fuel Type



Last week hydro units had the largest market share in the active regulating reserve market with 56.2%. In the active spinning reserve market, hydro units had the leading market share with 41.1% while in the active supplemental reserve market, hydro units dominated with a 67.9% market share.

Coal units dominated the standby regulating reserve market with a 67.6% market share. Leading market share in the standby spinning market was held by gas-cogen units with a 57.1% market share. In the standby supplemental reserve market, gas-other units had the leading market share with 53.8%.

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.