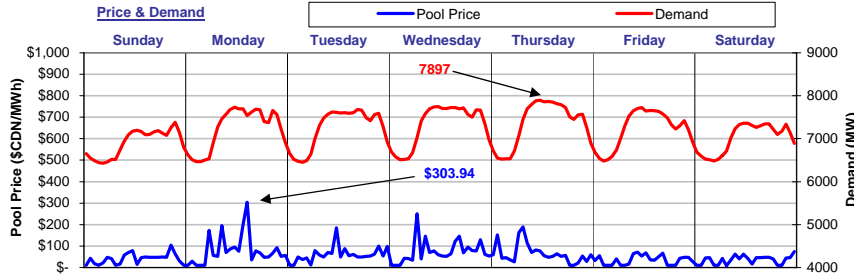


# The Market Monitor

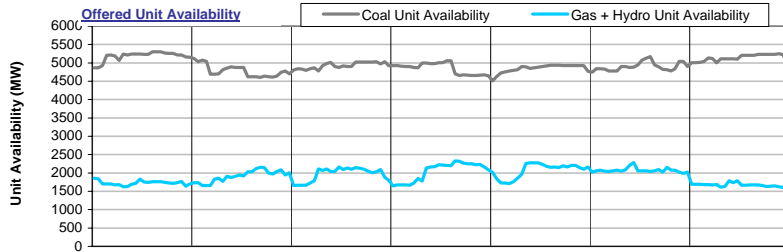
WATCHING THE MARKET : your fact source

Week Ending April 16, 2005

## Weekly Highlights

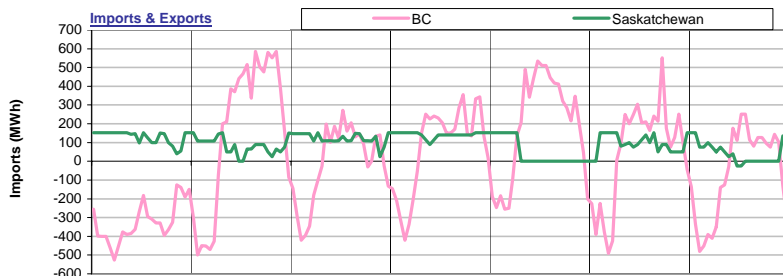


For the week ending April 16, 2005, **Pool Price** averaged \$49.22/MWh and ranged from a minimum of \$9.69/MWh in HE01 on Monday to a maximum of \$303.94/MWh in HE15 on Monday. **Demand** reached a high of 7897 MW in HE12 on Thursday and a low of 6432 MW in HE05 on Sunday. Average demand for the week was 7187MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.08.

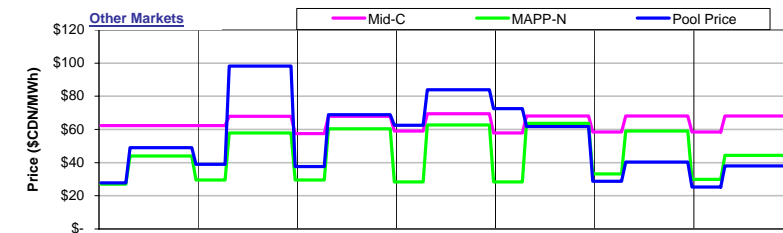


**Coal Unit Availability** averaged 4946 MW last week. This is an equivalent availability of 85% (based on MCR). **Gas and Hydro Unit Availability** averaged 1926MW last week, which is an equivalent of 34% (based on MCR).

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

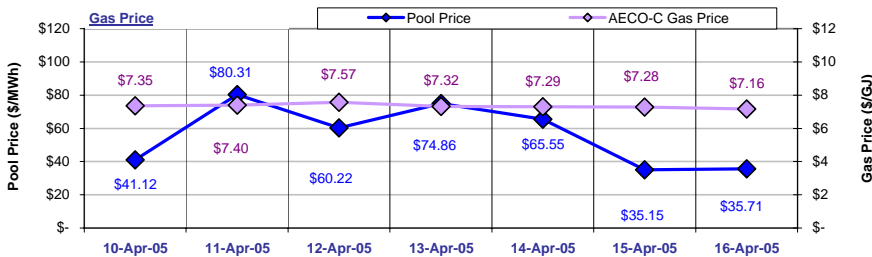


Alberta was a net importer from **BC** last week with total imports equal to 1,890MWh. Alberta was a net importer from **Saskatchewan** last week with total imports equal to 15,877MWh. Overall, Alberta imported 17,767MWh of electricity last week.



**Pool Prices** were generally lower than prices in **Mid-C** and higher than prices in **MAPP-N** last week. **Mid-C** prices averaged \$68.27/MWh on-peak and \$59.41/MWh off-peak. **MAPP-N** prices averaged \$58.01/MWh on-peak and \$29.38/MWh off-peak.

Prices in \$/MWh at an exchange rate of 1.2301.

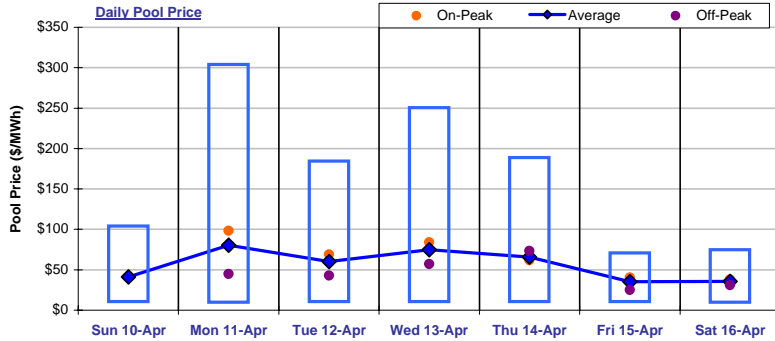


The average **AECO-C Gas Price** last week was \$7.34/GJ and ranged from a minimum of \$7.16/GJ to \$7.57/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 5.17GJ/MWh to a high of 10.86GJ/MWh. The average market heat rate for the week was 6.69GJ/MWh.

# Wholesale Market

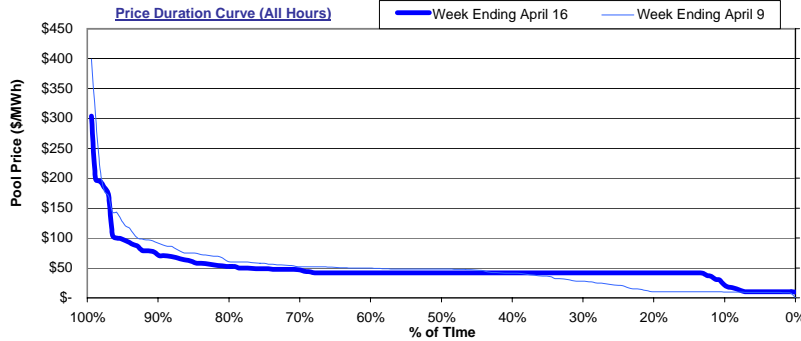
## Weekly Market Statistics

	Sunday 10-Apr	Monday 11-Apr	Tuesday 12-Apr	Wednesday 13-Apr	Thursday 14-Apr	Friday 15-Apr	Saturday 16-Apr	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 41.12	\$ 80.31	\$ 60.22	\$ 74.86	\$ 65.55	\$ 35.15	\$ 35.71	\$ 56.13	\$ 50.20	11.8%	\$ 46.87
On-Peak	NA	\$ 98.14	\$ 68.86	\$ 83.86	\$ 61.67	\$ 40.24	\$ 38.05	\$ 65.14	\$ 54.57	19.4%	\$ 51.75
Off-Peak	\$ 41.12	\$ 44.64	\$ 42.92	\$ 56.88	\$ 73.29	\$ 24.96	\$ 31.04	\$ 44.12	\$ 44.37	-0.6%	\$ 37.51
COV	0.59	0.88	0.59	0.72	0.70	0.62	0.55	0.66	0.76	-12.5%	
<b>Demand</b>											
Average	6,905	7,240	7,243	7,321	7,355	7,229	7,017	7,187	7,180	0.1%	7,492
Minimum	6,432	6,464	6,451	6,510	6,525	6,482	6,485	6,478	5,607	15.5%	6,017
Maximum	7,380	7,730	7,679	7,746	7,897	7,725	7,362	7,646	7,660	-0.2%	9,236
<b>Coal Unit Availability</b>											
Average	5,184	4,782	4,926	4,850	4,847	4,897	5,138	4,946	5,212	-4.6%	5,353
Utilization	89%	82%	84%	83%	83%	84%	88%	85%	89%	-4.6%	92%
<b>Gas and Hydro Unit Availability</b>											
Average	1,727	1,917	1,970	2,047	2,073	2,072	1,676	1,926	1,906	0.4%	2,283
Utilization	36%	40%	41%	43%	44%	44%	35%	34%	34%	0.4%	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 \$55.62/MWh while the off-peak Pool price for the week was \$40.68/MWh.

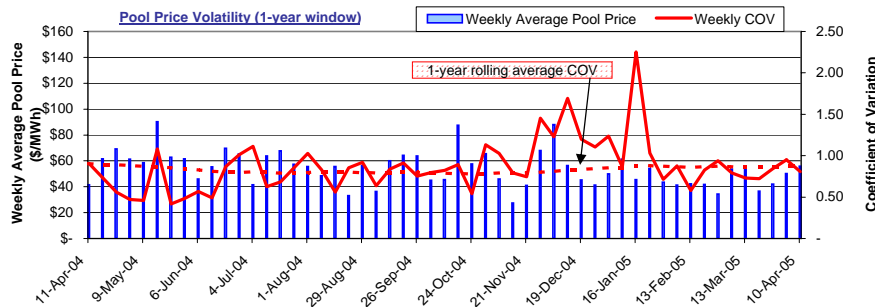
Note: Sundays and most statutory holidays are defined as off-peak.



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

For the week ending April 16, prices were at or below:

- \$20/MWh 10% of the time
- \$50/MWh 79% of the time
- \$100/MWh 95% of the time
- \$250/MWh 99% of the time
- \$500/MWh 100% of the time



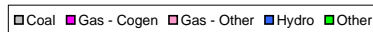
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

Pool price volatility decreased for the week ending April 16 from the previous week.

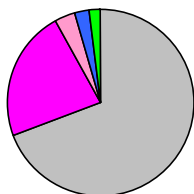
Pool price volatility also moved below the 1-year rolling average COV value.

## Market Share Statistics

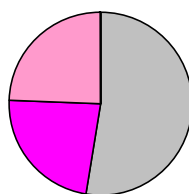
By Fuel Type:



Weekly Generation by Fuel Type



Weekly Price Setting by Fuel Type



By Submitting Customer:

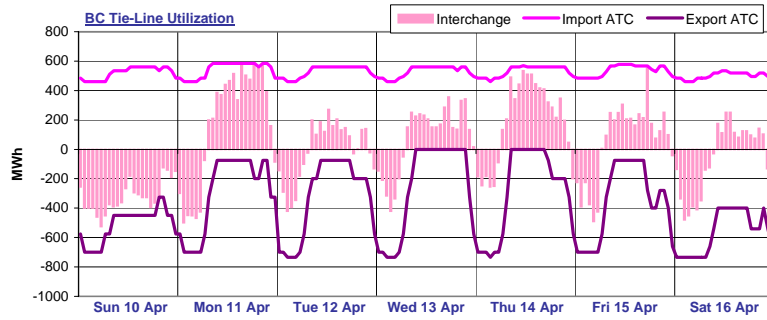
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 69.2% of the generation in the province and set price 52.5% of the time. Gas-cogen units accounted for 22.7% of the generation and set price 23.2% of the time last week while other gas units made up 3.8% of generation and set price 24.3% of the time.

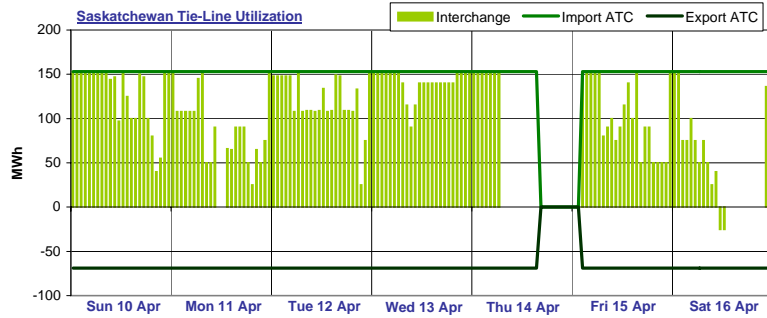
A total of 10 market participants set price last week. One market participants set price more than 20% of the time last week. The top price setter set price 38.3% of the time and the top five price setters set price a total of 86.8% of the time.

# Interties



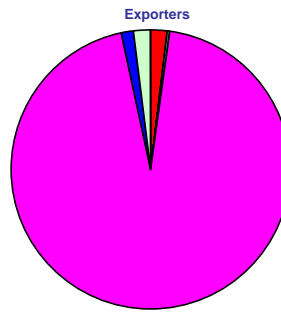
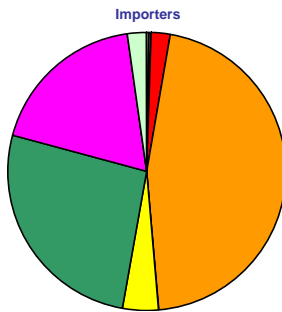
BC import capacity was 24% utilized last week while BC export capacity was 24% utilized. Energy was being imported into Alberta over the BC tie-line 55% of the time and exported out of Alberta over the BC tie-line 45% of the time last week. There was no activity on the BC tie-line 0% of the time last 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 66% utilized last week while Saskatchewan export capacity was 0.5% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 81% 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 18% of the time last week.

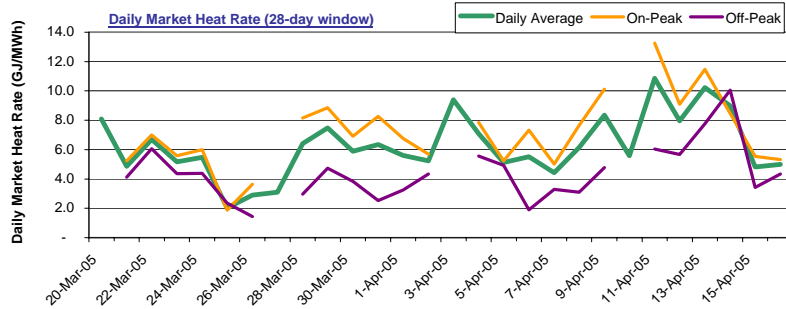
## Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 45.9% while the second most active importer had a market share of 26.4%. There were a total of 6 exporters last week. The most active exporter had a market share of 94.5% while the next largest exporter had a market share of 1.8%.

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 6.2 GJ/MWh and ranged from a low of 2.0 GJ/MWh to a high of 10.9 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 7.1 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 4.4 GJ/MWh.

## Sparksreads

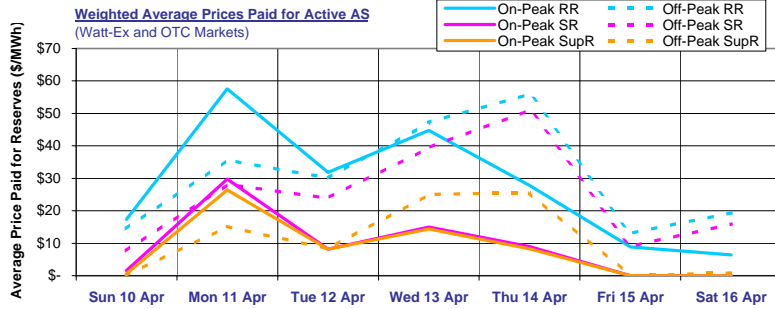
Date	AECO-C Gas Price (\$/GJ)	Daily Average			On-Peak			Off-Peak		
		Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0	Pool Price (\$/MWh)	Sparksread (\$/MWh) HR=7.5	Sparksread (\$/MWh) HR=10.0
Sun 10 Apr	\$ 7.35	\$ 41.12	(14.03)	(32.41)	NA	NA	NA	\$ 41.12	(14.03)	(32.41)
Mon 11 Apr	\$ 7.40	\$ 80.31	24.83	6.34	\$ 98.14	42.67	24.17	\$ 44.64	(10.83)	(29.33)
Tue 12 Apr	\$ 7.57	\$ 60.22	3.47	(15.45)	\$ 68.86	12.12	(6.80)	\$ 42.92	(13.82)	(32.74)
Wed 13 Apr	\$ 7.32	\$ 74.86	19.99	1.69	\$ 83.86	28.98	10.69	\$ 56.88	2.00	(16.29)
Thu 14 Apr	\$ 7.29	\$ 65.55	10.84	(7.40)	\$ 61.67	6.97	(11.27)	\$ 73.29	18.59	0.35
Fri 15 Apr	\$ 7.28	\$ 35.15	(19.44)	(37.63)	\$ 40.24	(14.35)	(32.54)	\$ 24.96	(29.62)	(47.82)
Sat 16 Apr	\$ 7.16	\$ 35.71	(18.00)	(35.91)	\$ 38.05	(15.66)	(33.57)	\$ 31.04	(22.68)	(40.59)

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.

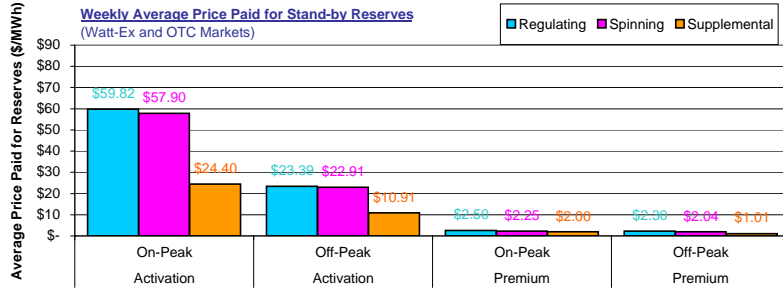
Off-peak sparksreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

# Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$27.58/MWh, \$9.37/MWh and \$8.54/MWh respectively for active regulating, spinning and supplemental reserves.

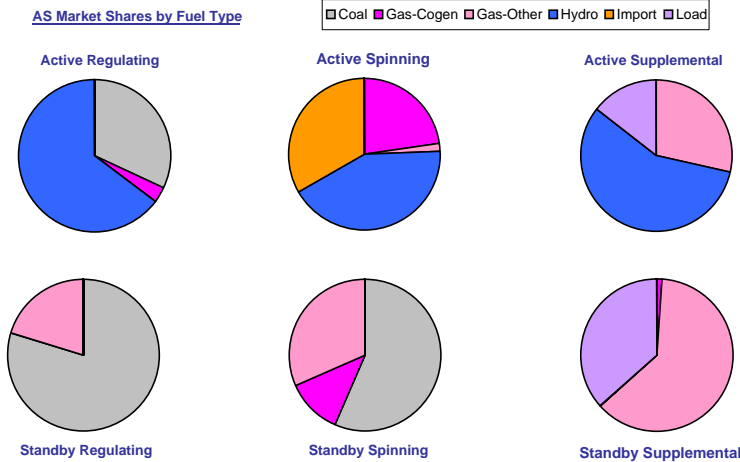
Active average off-peak prices were somewhat higher and averaged \$31.02/MWh, \$25.07/MWh and \$10.77/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$10.91/MWh for off-peak supplemental reserves to \$59.82/MWh for on-peak regulating reserves.

Weekly average premium prices ranged from \$1.01/MWh for off-peak supplemental reserves up to \$2.50/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 64.7%. In the active spinning reserve market, hydro units had the leading market share with 42.2% while in the active supplemental reserve market, hydro units dominated with a 57.0% market share.

Coal units dominated the standby regulating reserve market with a 79.7% market share. Leading market share in the standby spinning market was held by Coal units with a 56.5% market share. In the standby supplemental reserve market, gas units had the leading market share with 62.2%.

## 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.