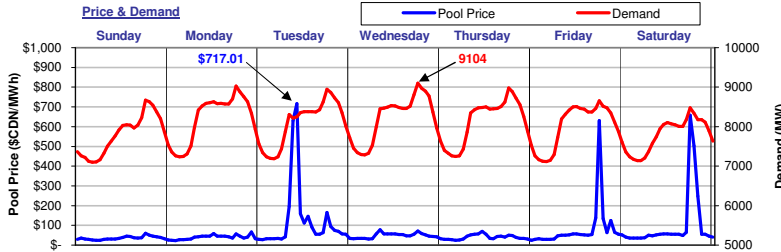


# The Market Monitor

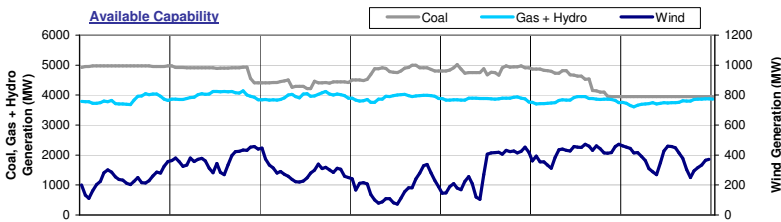
WATCHING THE MARKET : your fact source

Week Ending November 7, 2009

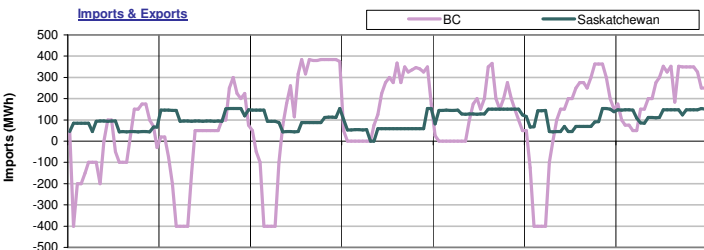
## Weekly Highlights



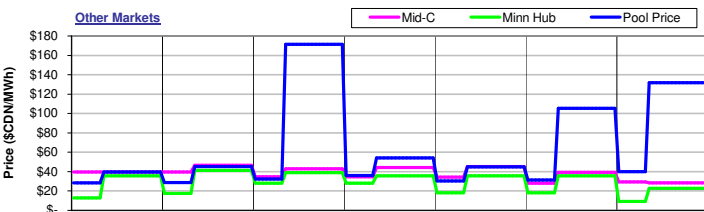
For the week ending November 7, 2009, **Pool Price** averaged \$67.13/MWh and ranged from a minimum of \$23.36/MWh in HE02 on Monday to a maximum of \$717.01/MWh in HE10 on Tuesday. **Demand** reached a high of 9104 MW in HE18 on Wednesday and a low of 7099 MW in HE04 on Sunday. Average demand for the week was 8035 MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.05.



**Coal Unit Availability** averaged 4611 MW last week. This is an equivalent availability of 76%. **Gas, Hydro and Other Unit Availability** averaged 3882 MW last week, which is an equivalent of 69%. **Wind Generation** averaged 310 MW last week. This is an equivalent availability of 55%. Availability numbers are based on MW offered into the energy merit order.

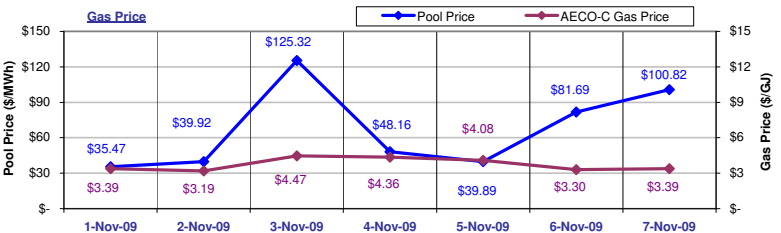


Alberta was a net importer from BC last week with total imports equal to 17,720 MWh. Alberta was a net importer from Saskatchewan last week with total imports equal to 17,142 MWh. Overall, Alberta imported 34,862 MWh of electricity last week.



**Pool Prices** were generally higher than prices in **Mid-C** and higher than prices in **Minn Hub** last week. **Mid-C** prices averaged \$41.15/MWh on-peak and \$34.32/MWh off-peak. **Minn Hub** prices averaged \$35.00/MWh on-peak and \$18.91/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.08518.



The average **AECO-C Gas Price** last week was \$3.74 GJ and ranged from a minimum of \$3.19/GJ to \$4.47/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 9.77 GJ/MWh to a high of 29.78 GJ/MWh. The average market heat rate for the week was 18.05 GJ/MWh.

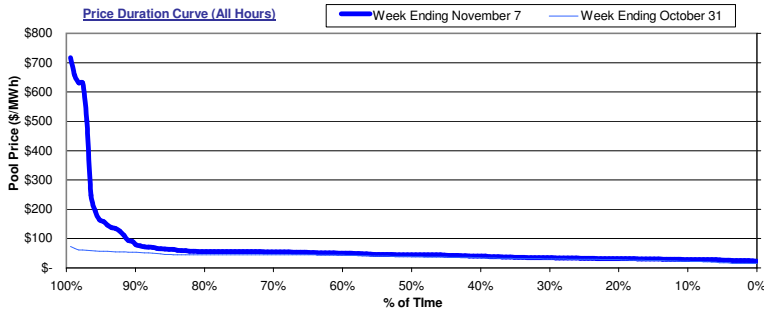


Alberta's Market Surveillance Administrator is in place to monitor the fair, efficient and openly competitive operation of all electricity markets within the province. The Market Monitor is a weekly publication by the MSA intended to educate industry participants and the public on market activities for the previous week. Any questions regarding the material in this publication should be directed to MSA staff. Our contact information is available on the MSA website: [www.albertamsa.ca](http://www.albertamsa.ca)

# Wholesale Market

## Weekly Market Statistics

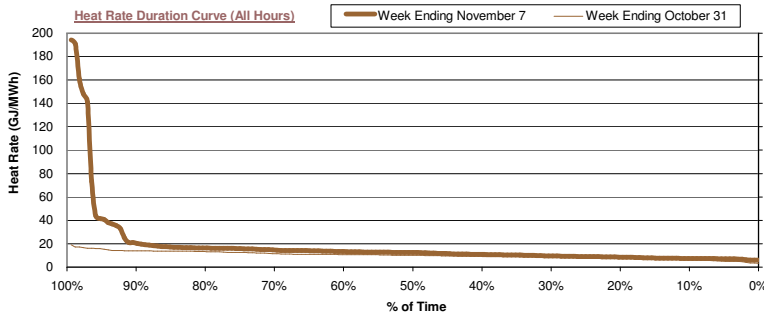
	Sunday 1-Nov	Monday 2-Nov	Tuesday 3-Nov	Wednesday 4-Nov	Thursday 5-Nov	Friday 6-Nov	Saturday 7-Nov	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 35.47	\$ 39.92	\$ 125.32	\$ 48.16	\$ 39.89	\$ 81.69	\$ 100.82	\$ 67.13	\$ 37.59	78.6%	\$ 47.42
On-Peak	NA	\$ 45.29	\$ 171.41	\$ 54.31	\$ 45.01	\$ 105.20	\$ 131.87	\$ 92.18	\$ 45.29	103.5%	\$ 61.01
Off-Peak	\$ 35.47	\$ 29.17	\$ 33.14	\$ 35.87	\$ 29.63	\$ 34.67	\$ 38.72	\$ 34.18	\$ 27.31	25.1%	\$ 28.24
COV	0.24	0.27	1.41	0.26	0.30	1.48	1.54	0.79	0.26	204.2%	
<b>Heat Rate</b>											
Average	10.45	12.53	28.05	11.04	9.77	24.74	29.78	18.05	9.10	98.4%	13.05
On-Peak	NA	14.21	38.37	12.45	11.03	31.86	38.95	24.48	11.01	122.4%	16.78
Off-Peak	10.51	9.16	7.42	8.22	7.26	10.50	11.44	9.50	6.55	45.0%	7.77
<b>Demand</b>											
Average	7,786	8,201	8,102	8,214	8,138	8,019	7,798	8,037	8,078	-0.5%	7,894
Minimum	7,099	7,240	7,184	7,288	7,244	7,113	7,136	7,186	7,188	0.0%	6,454
Maximum	8,667	9,028	8,945	9,104	8,975	8,655	8,476	8,836	8,728	1.2%	9,753
<b>Coal Unit Availability</b>											
Average	4,970	4,834	4,393	4,800	4,844	4,466	3,953	4,609	5,119	-8.4%	5,061
AC/MC	82%	80%	73%	79%	80%	74%	65%	76%	85%		84%
<b>Gas, Hydro and Other Unit Availability</b>											
Average	3,835	3,999	3,963	3,921	3,869	3,827	3,763	3,882	3,968	-2.8%	3,616
AC/MC	68%	71%	70%	69%	68%	68%	67%	69%	71%		68%



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 7**, prices were at or below:

- \$20/MWh 0% of the time
- \$50/MWh 60% of the time
- \$100/MWh 91% of the time
- \$250/MWh 96% of the time
- \$500/MWh 96% of the time



The heat rate duration curves show the % of time that the implied market heat rate was at or below a certain value during the week. For the week ending **November 7** implied market heat rates were at or below:

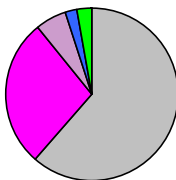
- 5.0 GJ/MWh 0% of the time
- 10.0 GJ/MWh 33% of the time
- 15.0 GJ/MWh 72% of the time
- 20.0 GJ/MWh 90% of the time

### Market Share Statistics

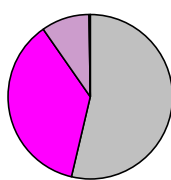
By Fuel Type:

■ Coal 
 ■ Gas - Cogen 
 ■ Gas - Other 
 ■ Hydro 
 ■ Other

Weekly Generation by Fuel Type

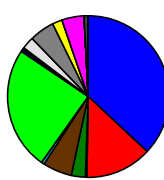


Weekly Price Setting by Fuel Type



By Submitting Customer:

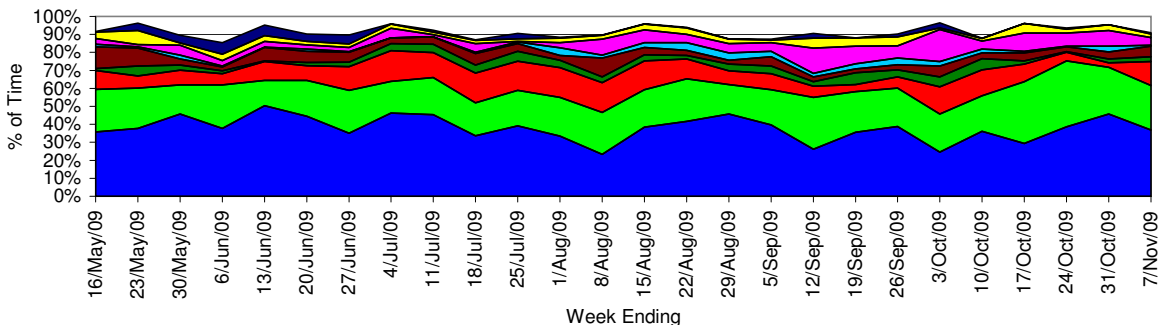
Weekly Price Setting by Submitting Customer



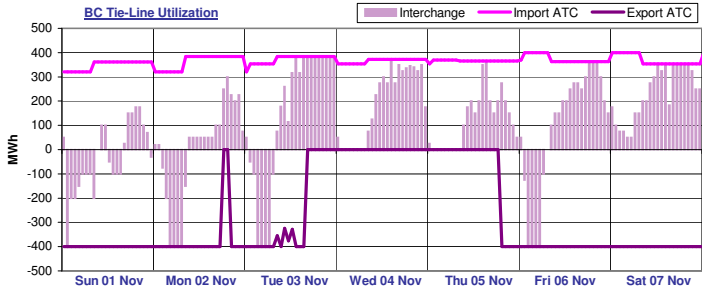
Last week, **coal units** were responsible for 61.4% of the generation in the province and set price 53.6% of the time. **Gas-cogen** units accounted for 27.8% of the generation and set price 36.7% of the time last week while **other gas** units made up 5.8% of generation and set price 9.5% of the time.

A total of 14 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 36.9% of the time and the top five price setters set price a total of 85.8% of the time.

### Weekly Price Setting by Submitting Customer

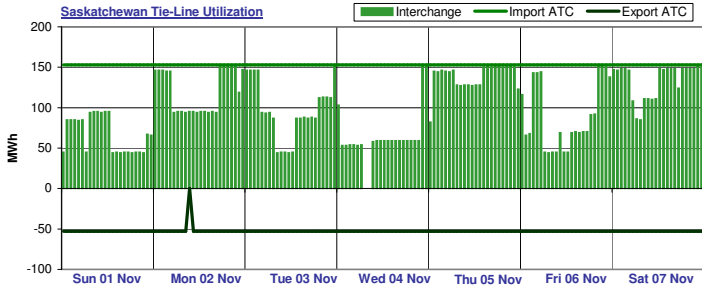


# Interties

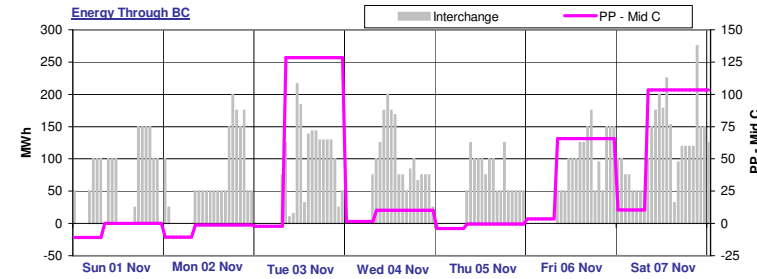


BC import capacity was 42% utilized last week while BC export capacity was 18% utilized. Energy was being imported into Alberta over the BC tie-line 71% of the time and exported out of Alberta over the BC tie-line 20% of the time last week. There was no activity on the BC tie-line 10% of the time last 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.



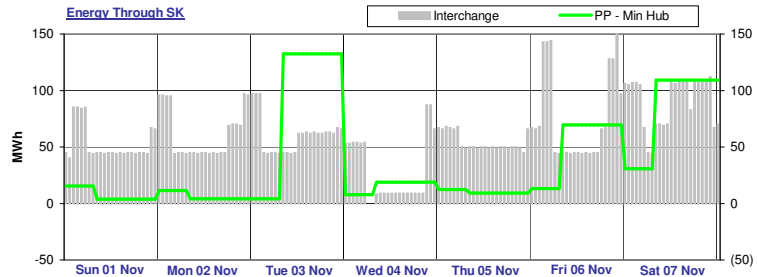
Saskatchewan import capacity was 66% utilized last week while Saskatchewan export capacity was 0% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 99% of the time and exported out of Alberta over the Saskatchewan tie-line 0% of the time last week. There was no activity on the Saskatchewan tie-line 1% of the time last week.



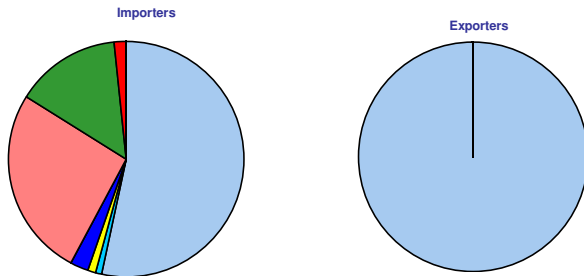
Last week, Alberta spot prices were mostly higher relative to prices in the Pacific Northwest as represented by Mid-C index prices, supporting import activity across the Alberta - BC interconnection.

Alberta prices were generally higher than prices in MAPP as represented by spot prices at the Minnesota Hub, which generally supports import activity across the Alberta - Saskatchewan interconnection.

Note: Platt's day-ahead strip prices used in energy through BC and SK graphs.



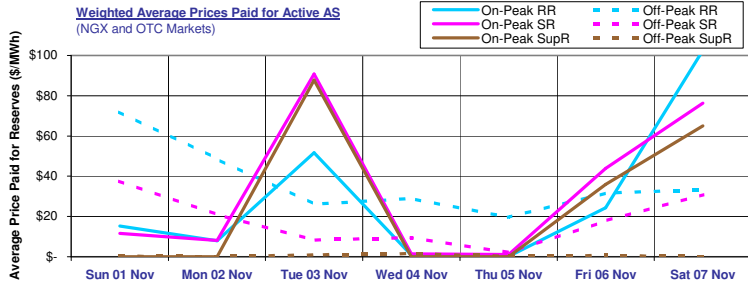
Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 53.3% while the second most active importer had a market share of 26.1%. There were a total of 1 exporter last week. The most active exporter had a market share of 100% while the next largest exporter had a market share of 0%.

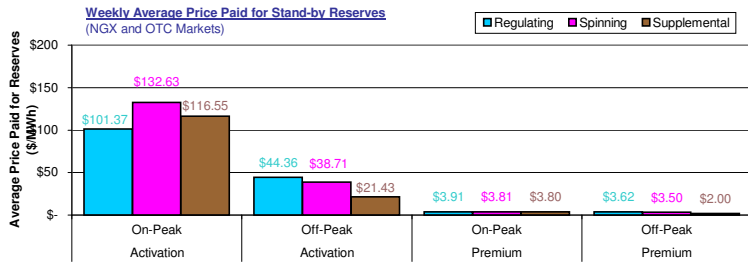
Note: Market shares are based on the combined activity on both interties.

# Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were **\$28.84/MWh**, **\$32.90/MWh** and **\$26.60/MWh** respectively for active **regulating**, **spinning** and **supplemental** reserves.

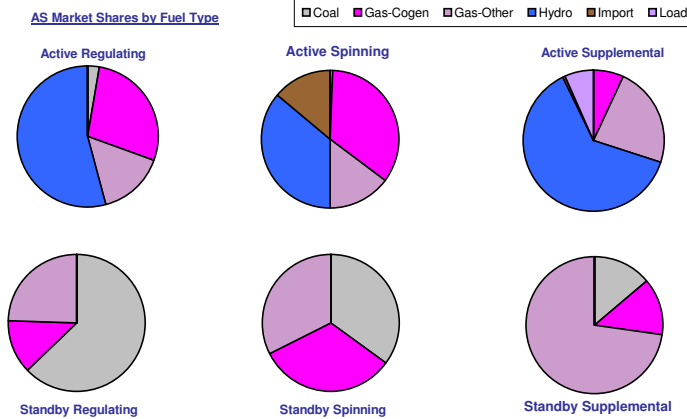
Active average off-peak prices were **higher** and averaged **\$36.27/MWh**, **\$18.16/MWh** and **\$0.52/MWh** for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from **\$21.43/MWh** for **off-peak supplemental** reserves to **\$132.63/MWh** for **on-peak spinning** reserves.

Weekly average premium prices ranged from **\$2.00/MWh** for **off-peak supplemental** reserves up to **\$3.91/MWh** for **on-peak regulating** reserves.

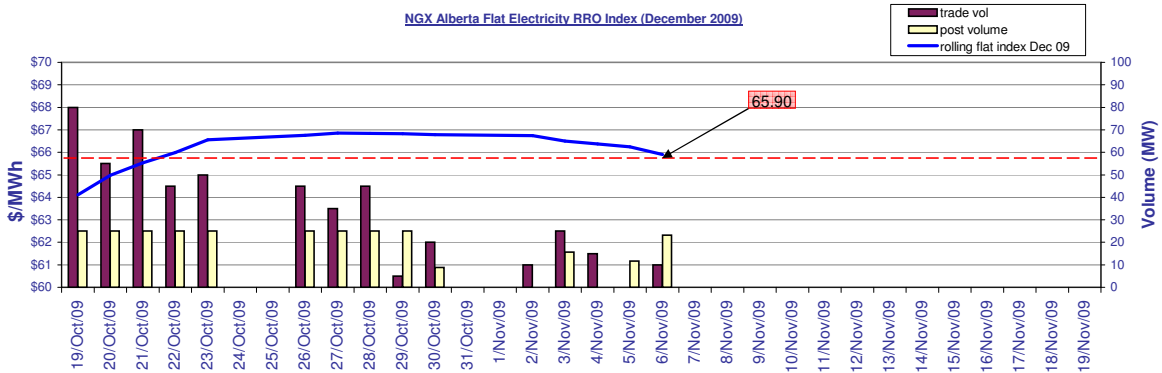
## AS Market Shares by Fuel Type



Last week **hydro** units had the largest market share in the **active regulating** reserve market with **54.1%**. In the **active spinning** reserve market, **gas cogen** units had the leading market share with **36.2%** while in the **active supplemental** reserve market, **hydro** units dominated with a **62.9%** market share.

**Coal** units dominated the **standby regulating** reserve market with a **62.7%** market share. Leading market share in the **standby spinning** market was held by **coal** units with a **34.9%** market share. In the **standby supplemental** reserve market, **gas** units had the leading market share with **72.8%**.

# RRO Procurement



# Glossary

- 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 Minn Hub: 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 (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 Minn Hub: HE24 (of the previous day) through HE07 (of the day in question), Monday through Sunday (prevailing Central time)
- ATC**  
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.