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MSA Report

Quarterly Report

April – June 2006

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Market Surveillance Administrator

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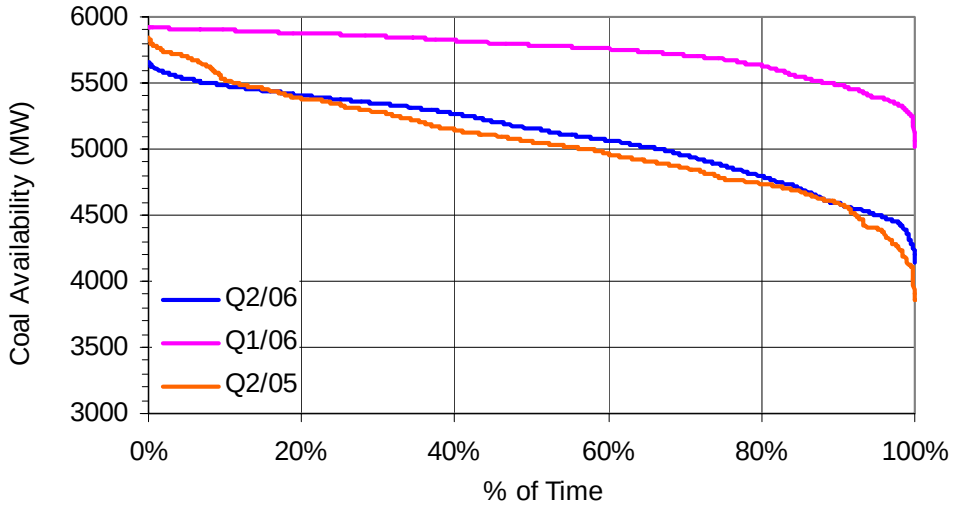
1 FEATURED MARKET DEVELOPMENTS DURING Q2/06

1.1 Electricity Prices

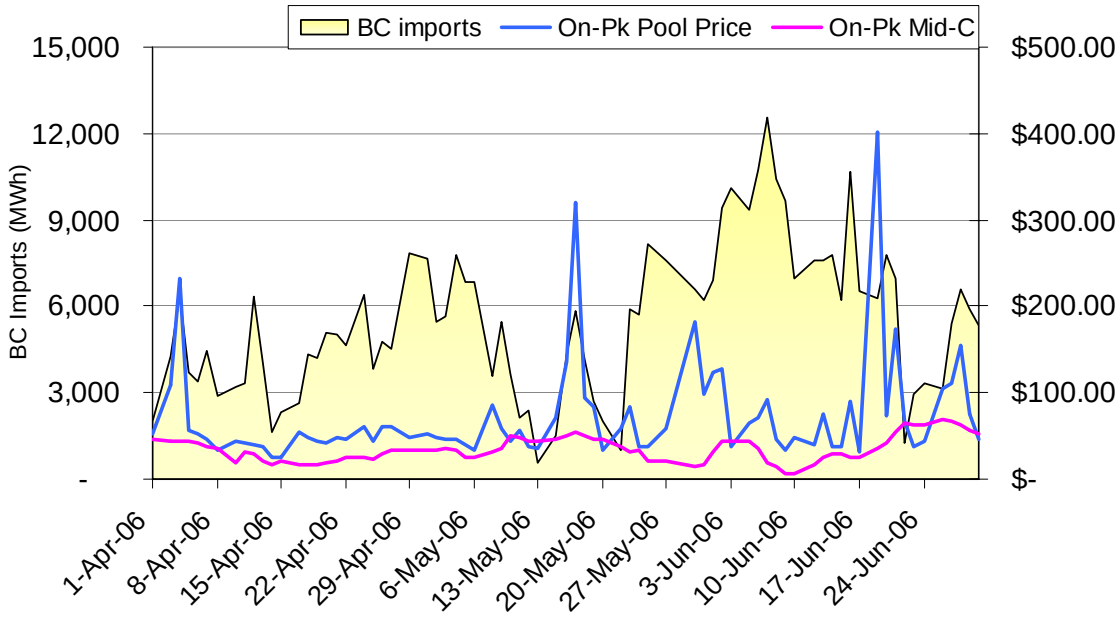
Wholesale market prices were marginally lower in Q2/06 averaging $53.62/MWh relative to $56.84MWh last quarter and $51.44MWh in Q2/05. Despite relatively flat electricity prices, heat rates increased quarter over quarter to 9.5 GJ/MWh from 7.9 GJ/MWh in Q1/06 and 7.4 GJ/MWh in the same quarter a year ago as gas prices continued to soften into summer due to exceptionally high storage levels.

Contributing to higher price volatility in Q2/06 was lower coal availability relative to Q1/06, and further by an increase in the percentage of unplanned (or forced) outages of PPA coal units. As indicated below, at least 5000 MW of coal generation was being offered into the market nearly 100% of the time in Q1/06 as compared to approximately 67% of the time in Q2/06. The proportion of unplanned outages increased to 5.7% on a PPA weighted average basis in Q2/06 as compared to 1.6% last quarter.



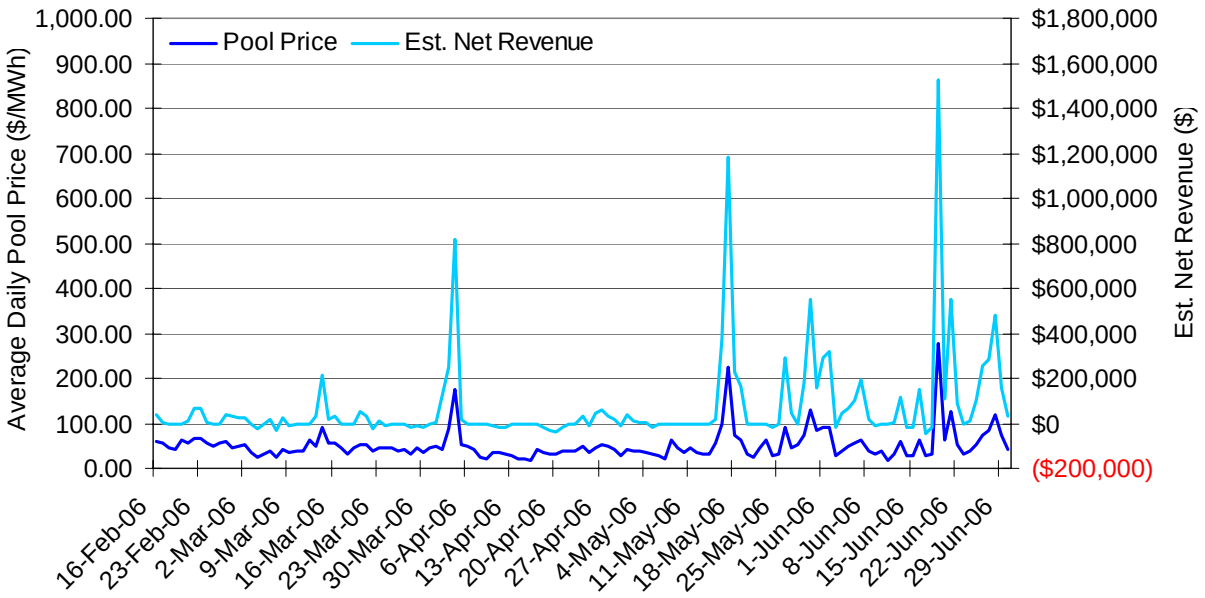
While price volatility was up substantially in the quarter, overall average prices were contained by the seasonal increase in BC import volumes driven by high water levels in the Pacific Northwest. In fact, June hydroelectric output in the Pacific Northwest was up 33% as compared to June 2005. The surplus hydro situation in the Pacific Northwest placed downward pressure on Mid-Columbia prices creating economic import opportunities even at modest Alberta market price levels. The following chart emphasizes that while high import volumes are typically expected to coincide with high Pool prices, importing via BC even at modest Pool price levels

was generally rational since the economic spread was attractive almost throughout the quarter.



1.2 Asset control changes

During Q2/06, EPCOR Utilities Inc. announced the sale of the Battle River Power Purchase Arrangement (PPA) and EPCOR's Battle River Power Syndicate Agreement (PSA) to Enmax Corporation. The end of the quarter also saw the conclusion of EPCOR's short-term tolling agreement for the rights to the capacity of the Calpine Calgary Energy Centre. As of the beginning of Q3/06, Calpine Power L.P has entered into a two month tolling agreement with TransAlta Energy Marketing Corporation. At the outset of EPCOR's tolling agreement, EPCOR had voluntarily agreed to a compliance plan with the MSA. A significant component of the plan was an undertaking not to run the plant below its variable cost so as to avoid sustained losses (on a stand-alone basis). The figure below summarizes a directional analysis to estimate the operating profitability of the asset over the tolling agreement term and indicates that the unit was operating regularly without sustained periods of negative operating profitability. The analysis suggested an overall average net revenue of approximately $34/MWh over the term of the agreement.



The MSA continues to monitor all changes in asset control and examine whether changes have an impact on the overall operation of the market.

1.3 Shelf Strategies

In the MSA's Q1/06 report, it was noted that a 'shelf' of energy offers had been observed within a very narrow band of prices in the middle of the merit order, periodically containing a significant quantity of offered energy. It was also observed that this shelf often set SMP but in the latter part of the quarter was seen far less frequently. During Q2/06 this 'shelf' has not returned and in some hours, more 'slope' to the merit order is apparent. In other hours the merit order appears to be very 'thin' with few offers in the middle of the merit order, sometimes resulting in significant price volatility. While 'thinness' was observed many times during 2005, the MSA continues to carefully monitor offer strategies and competitive forces in the market and how these change in response to market fundamentals.

1.4 Regulated Rate Developments

Wire owners in Alberta are required to offer a regulated rate option (RRO) to those eligible customers (residential and small commercial customers) in their service area who choose not to enter a contract with an energy retailer. The new Regulated Rate Option Regulation (AR 262/2005) ushered in transition regulated monthly rates that beginning in July 2006, will be based on a blend of long and short term hedges. Over the next 4 years, the proportion of long term hedges will decline by a minimum of 20%

each year such that RRO rates after July 2010 will be based solely on month-ahead hedges. Two government reviews are scheduled within this transition period to assess whether the new rate setting mechanism is meeting the needs of the market. Regulated rates for the July 2006 – June 2007 period will be derived from 80% long term hedges (maximum) and 20% month-ahead (minimum).

Energy price setting plans (EPSP's) guide the process by which RRO providers determine their regulated rates. For the largest RRO providers (ENMAX, EPCOR, and DIRECT), these price setting plans are approved by the AEUB. In conjunction with these EPSP's, those RRO providers are required to file their monthly rates with the AEUB on a go-forward basis. While other municipally owned utilities and Rural Electrification Associations are also subject to the new regulation, their RRO rates are not subject to AEUB approval. Their EPSP's are approved by their own governing boards (municipal council or board of directors, respectively).

The two largest RRO providers in the province (ENMAX and EPCOR) conducted a series of energy auctions during Q2/06 to cover the long-term component of their respective RRO loads for the balance of 2006. For the month-ahead component, these two RRO providers have adopted the month-ahead electricity index published by the Natural Gas Exchange (www.ngx.com). This index represents trades, offers and bids on NGX for the month-ahead contract in the period from 45 days to 5 days prior to the next month. Other RRO providers have adopted slightly different approaches. Market participation has been encouraging thus far in both the full load auctions and on the month-ahead index. EPCOR indicated 11 active participants through their auction sessions in procuring 80% of their RRO load for the balance of 2006 in auctions conducted between late April and late May.

July 2006 is the first month reflecting RRO rates determined under the new RRO rate determination process. July rates for various jurisdictions are as follows:

July RRO Rate	$ / KWh
Enmax (Calgary)	$0.07553
Enmax (Lethbridge)	$0.08500
Enmax (Red Deer)	$0.07135
EPCOR (Edmonton)	$0.07337
Fortis Alberta	$0.07366
Direct	$0.07095

The MSA sees a role in ensuring and enhancing transparency with respect to the new RRO rate determination process and will continue to monitor the changes in the RRO procurement and the resulting impact on the market as a whole.

1.5 MSA Activities

Stakeholder Consultation Process - In its March, 2006 Stakeholder Meeting the MSA committed to working with stakeholders to develop a defined basis for stakeholder engagement and development of documented new processes. In addition, recent communications from the Department of Energy have contemplated that the MSA will engage stakeholders on various matters.

Early in May, in recognition of those commitments, the MSA began to engage stakeholders on three foundational undertakings:

- Definition of explicit Principles for Stakeholder Engagement, which will guide the MSA's approach to engaging market stakeholders whenever it addresses a public project.
- Definition of a proposed Project Stage Framework for all public MSA projects that describes standard stages and their contents, standard communications at each stage, the status of MSA documents at the various stages, and the points and nature of engagement at these stages.
- Definition of a proposed Process for Developing MSA Guidelines, using the Project Stage Framework.

The stakeholder consultation on those matters has carried on into July, in accordance with the schedule laid out. All related materials can be found on the MSA website under the Stakeholder Consultation Links Page.

Stakeholder Survey - In late May, the MSA posted the results of its annual stakeholder survey of views on how the MSA is fulfilling its mandate in the Alberta electricity market. This survey is conducted by an independent party with the MSA receiving only aggregate results. The ratings and feedback of individual respondents remains confidential. In the last two surveys, the MSA garnered strong ratings in most areas. This year's survey results however, indicated a pullback in views of the MSA's activities. Survey results indicated that awareness of the MSA's mandate increased yet again. The MSA was also seen as proactive in the market however respondents had less conviction that the MSA is objective and independent. Fewer respondents were satisfied that the MSA recognizes and reports on irregular market outcomes and overall, survey respondents gave lower marks on effectiveness of

the MSA relative to last year. The full survey report is available for review on the MSA website at: http://www.albertamsa.ca/3216.html

Changes to Regulations – Further to its April 28, 2006 policy paper entitled "*Roles and Mandates Refinements for the Alberta Electricity Industry Implementing Agencies*, the Department of Energy brought forward several draft regulations in Q2/06. The proposed regulations included the *Transmission Regulation*, *Transmission Must-Run Regulation, Isolated Generating Units and Customer Choice Amendment Regulation, Payment in Lieu of Tax Amendment Regulation, Balancing Pool Amendment Regulation,* and the *Market Surveillance Regulation.*

The government also engaged stakeholders on proposed changes in relation to the electricity *Code of Conduct Regulation*, although the timing of the consultations was distinct from that of the other regulations. It was expected the Department would issue a draft of that regulation for comment in July, 2006.

As reflected by their titles, the draft regulations have (at least in part) proposed various amendments to existing regulations. In the case of the MSA, the amendments would entail clarification of existing powers, the addition of new responsibilities or (in the case of the *Code of Conduct Regulation*) a different sharing of responsibilities as between the MSA and the EUB.

The status of most of the proposed regulations was addressed in a letter issued by the Department on June 26, 2006, and through a meeting with the EUA Advisory Committee held on July 17, 2006. The *Isolated Generating Units and Customer Choice Amendment Regulation* and the *Payment in Lieu of Tax Amendment Regulation* have been approved for enactment, while consultation on the other regulations will continue. The delay in roll out of the proposed changes prompts further delay in other industry initiatives including the implementation of "Quick Hits" rule changes as well as the Balancing Pool's auction of the Genesee PPA.

New to the MSA – The MSA recently welcomed Jenny Chen to the team in the position of Senior Market Analyst. Jenny brings to the MSA a strong background in trading and energy markets analysis.

2 APPENDIX A – WHOLESALE ENERGY MARKET METRICS

Table 1 - Pool Price Statistics

	Average Price[1]	On-Pk Price	Off-Pk Price	Std Dev[2]	Coeff. Variation[3]
Apr - 06	42.87	56.02	26.37	46.59	109%
May - 06	56.26	76.55	30.52	77.70	138%
Jun - 06	61.64	86.28	27.92	96.09	156%
Q2 - 06	**53.59**	**72.95**	**28.27**	**76.64**	**143%**
Jan - 06	72.12	93.21	47.60	58.57	81%
Feb - 06	54.07	65.56	38.76	30.35	56%
Mar - 06	44.08	51.54	33.74	27.68	63%
Q1 - 06	**56.76**	**70.10**	**40.03**	**43.24**	**76%**
Apr - 05	50.08	57.68	39.64	42.90	86%
May - 05	49.16	63.68	32.29	50.50	103%
Jun - 05	55.14	71.16	33.21	71.62	130%
Q2 - 05	**51.46**	**64.17**	**35.05**	**56.31**	**109%**

1 - $/MWh

2 - Standard Deviation of hourly pool prices for the period

3 - Coefficient of Variation for the period (standard deviation/mean)

Figure 1 – Pool Price Duration Curves

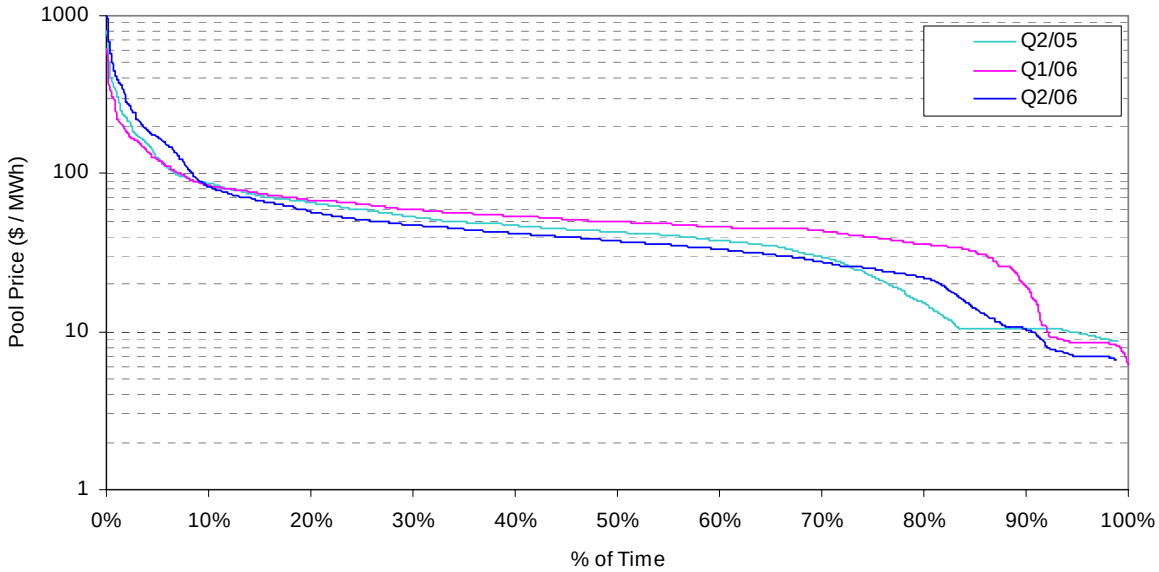


Figure 2 – Pool Price with Pool Price Volatility

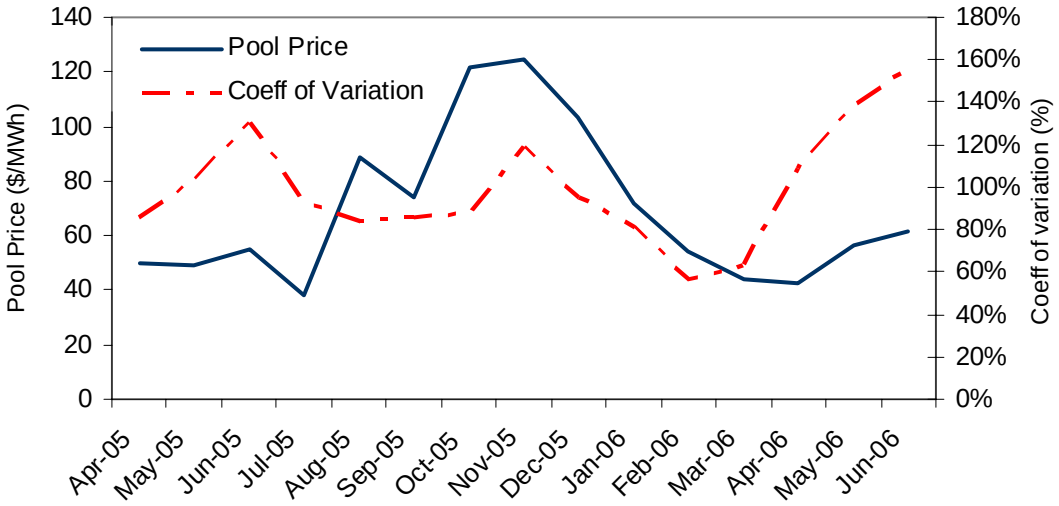


Figure 3 - Wholesale Electricity Price with AECO Gas Price

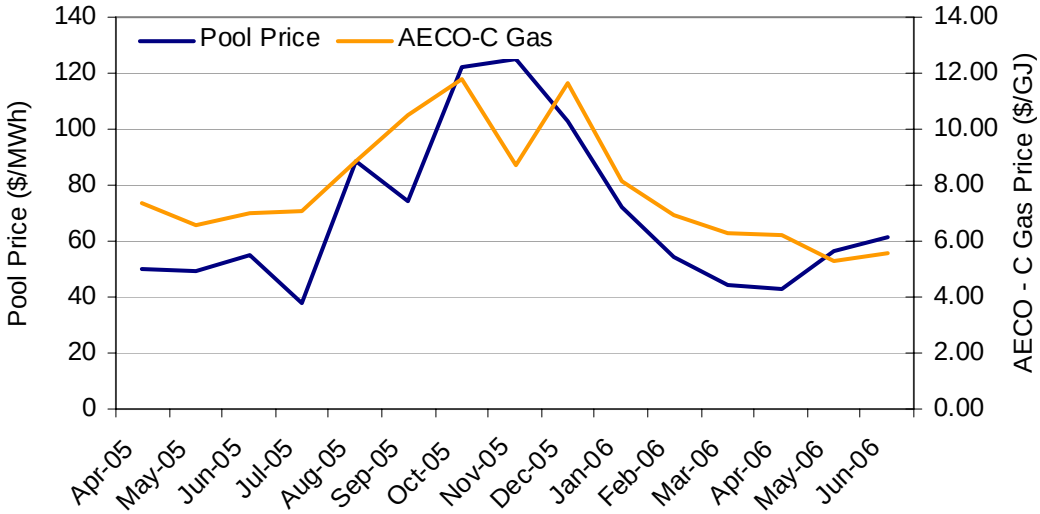


Figure 4 - Price Setters by Submitting Customer (All Hours)

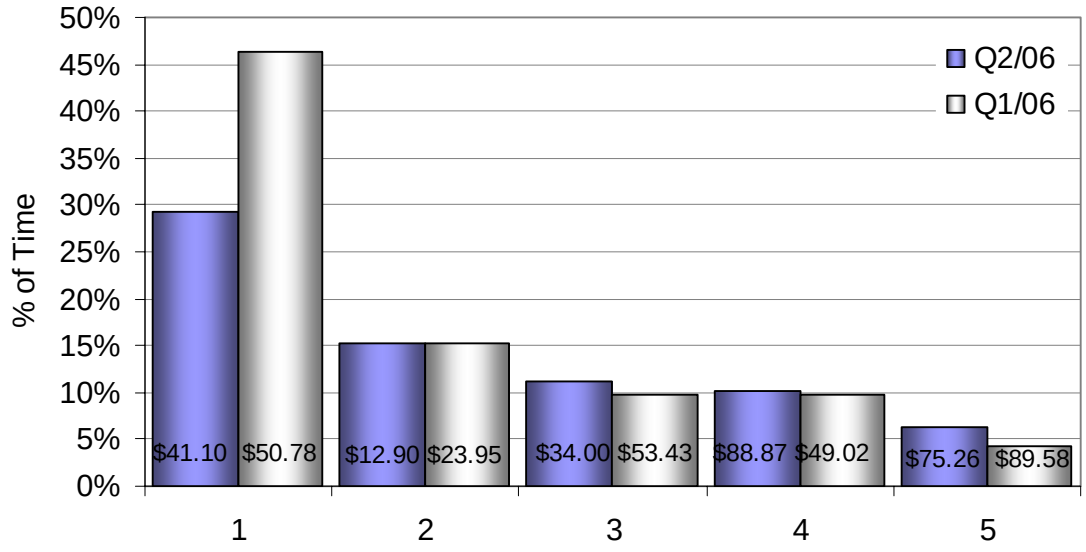


Figure 5 - Price Setters by Fuel Type (All Hours)

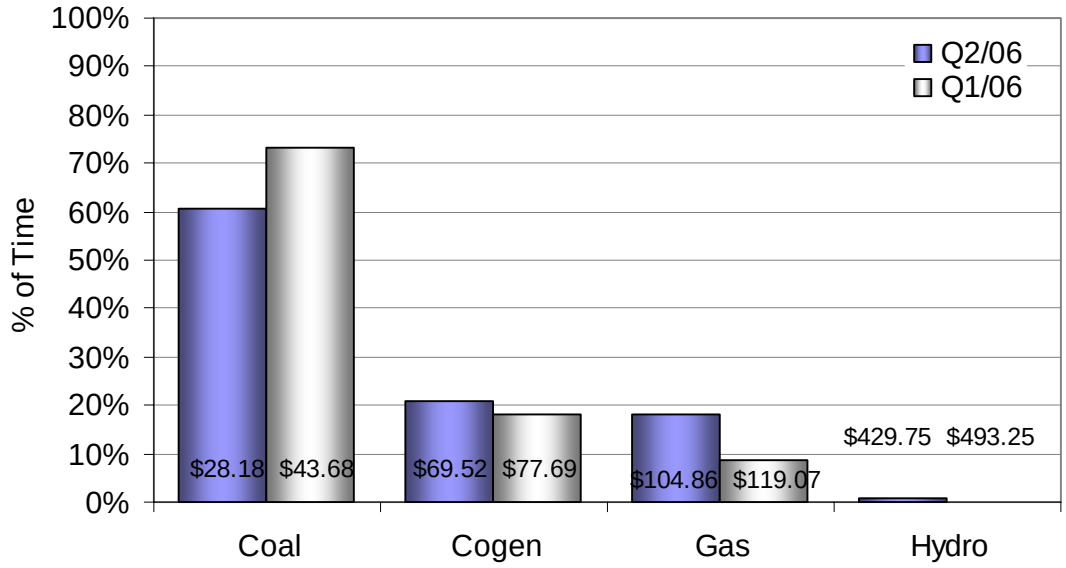
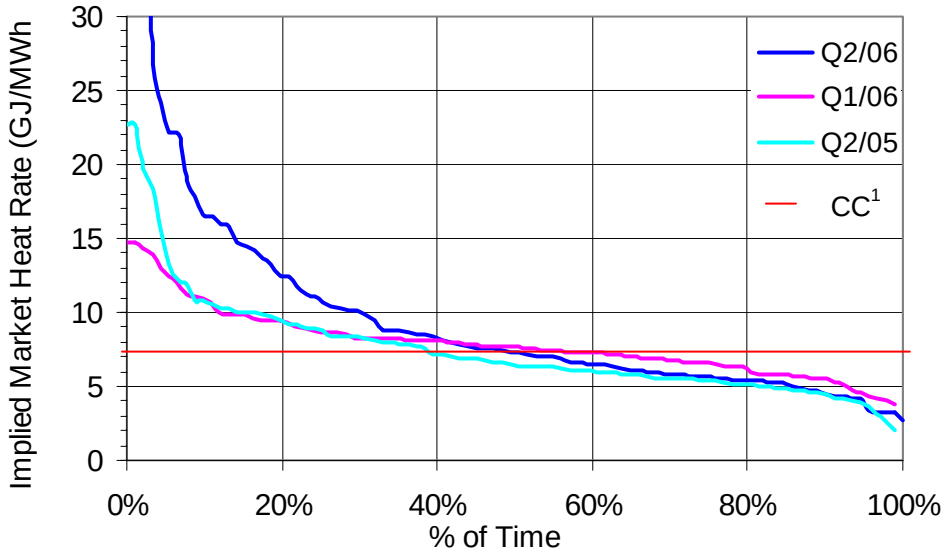


Figure 6 – Heat Rate Duration Curves (All Hours)



1 – CC denotes a representative combined-cycle generator with a heat rate of 7.5 GJ/MWh

Figure 7 - Implied Market Heat Rates (Q2/06)

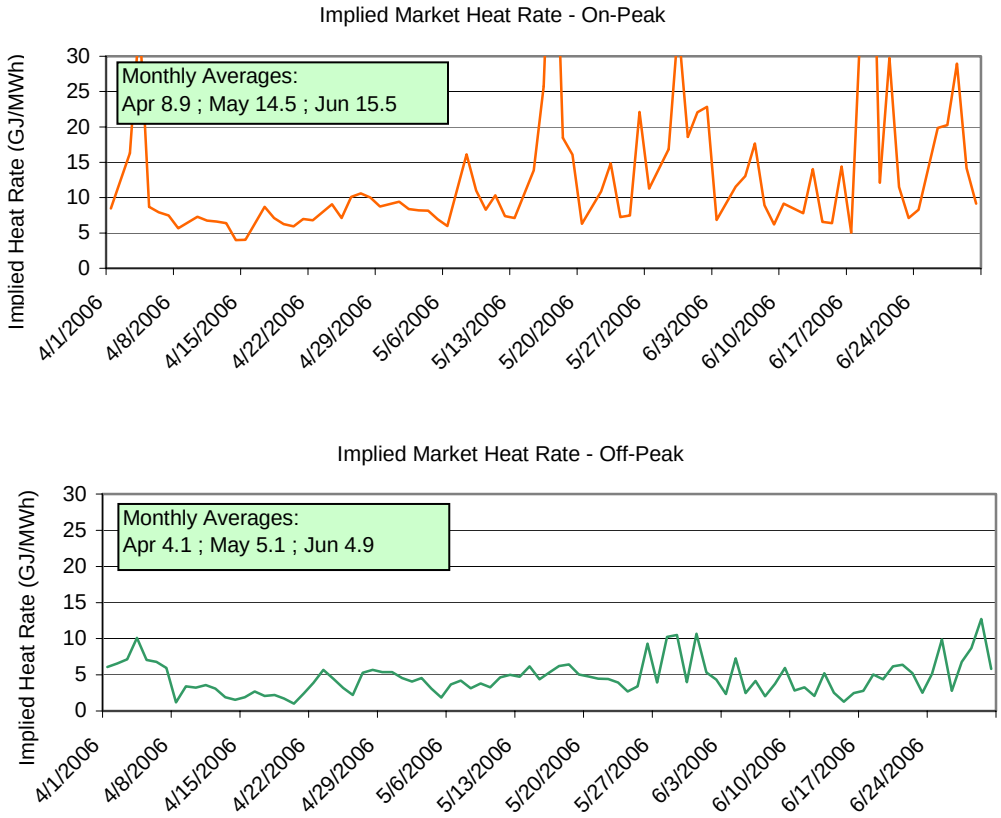


Figure 8 – PPA Outages by Quarter

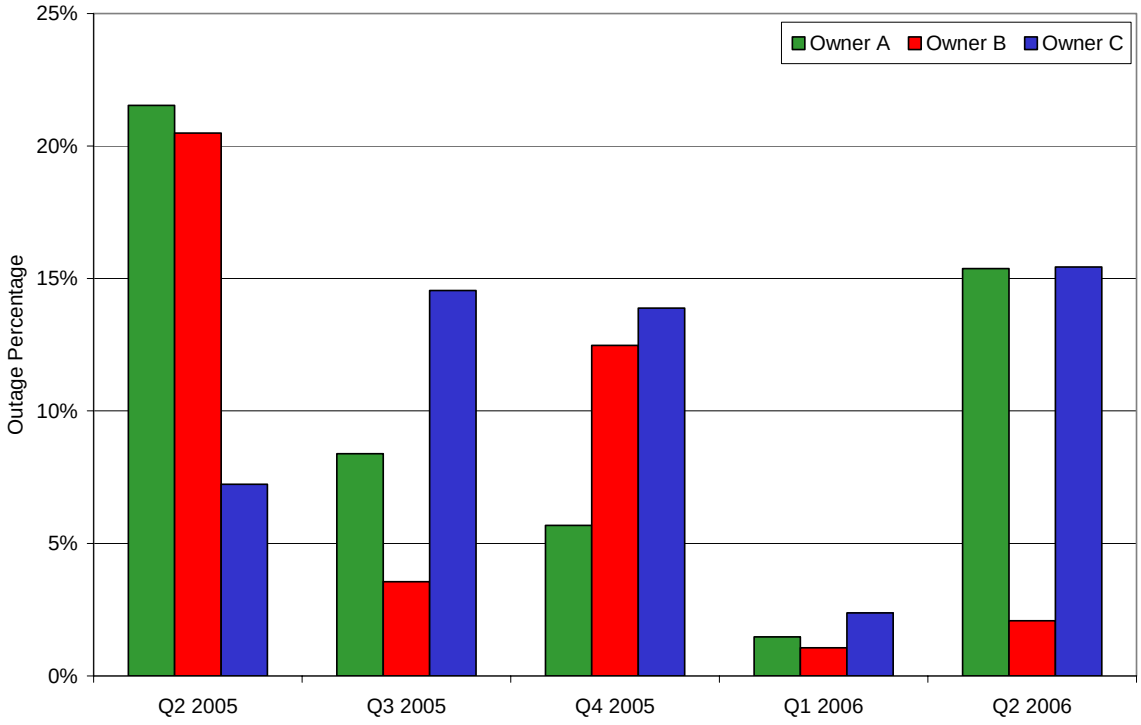


Table 2 - Percentage of Unplanned Outages for PPA Units

	Q2/06	2005	2004	2003	2002	2001
Owner-A	**9.3%**	5.0%	6.1%	4.9%	4.2%	3.2%
Owner-B	**1.8%**	5.4%	1.5%	1.5%	0.5%	1.2%
Owner-C	**4.9%**	6.5%	6.3%	5.7%	10.8%	8.8%
PPA weighted average	**5.7%**	5.9%	5.5%	4.9%	7.7%	6.3%

1) PPA units include: GN 1 & 2, BR 3, 4, 5, SH 1 & 2, SD 1 - 6, KH 1 & 2.
2) Outages rates are based on maximum continous rating (MCR), not gross unit capacity.

Table 3 - MW Weighted Portfolio Target Availability (%) vs Actual Availability (%) - Coal Fired PPA Units

	Target 2004	Actual 2004	Target 2005	Actual 2005	Target 2006	Actual Q2 2006
Owner-A	87%	88%	87%	90%	87%	85%
Owner-B	90%	97%	89%	90%	89%	98%
Owner-C	87%	89%	87%	88%	87%	85%
PPA weighted Average	87%	90%	87%	89%	87%	87%

Table 4 – PFEC and PFAM Tracking

Claim Type	Carry-Over	Submitted	Accepted	Rejected	Unresolved	Net kWh Adjustment
PFEC						
Q2/06	76	385	396	47	18	NA
Q1/06	127	641	607	85	76	NA
PFAM						
Q2/06	21	79	62	28	12	(252,833)
Q1/06	8	149	99	37	21	15,461,264

Table 5 – Summary of UFE Reasonable Exception Reports

Quarter	Outstanding	New	Resolved	Unresolved
Q2/06	170	39	1	208
Q1/06	132	38	0	170

3 APPENDIX B – TIE LINE METRICS

Table 6 – Q2/06 Tie Line Statistics

	BC			Saskatchewan			Overall		
	Imports	Exports	Net Imports	Imports	Exports	Net Imports	Imports	Exports	Net Imports
	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)
April	122,482	6,670	115,812	42,461	3,596	38,865	164,943	10,266	154,677
May	150,136	1,927	148,209	40,739	2,657	38,082	190,875	4,584	186,291
June	216,623	3,290	213,333	61,366	1,104	60,262	277,989	4,394	273,595
Total	489,241	11,887	477,354	144,566	7,357	137,209	633,807	19,244	614,563
On-Peak	76%	10%		57%	57%		71%	28%	
Off-Peak	24%	90%		43%	43%		29%	72%	

Figure 9 – Market Share of Importers and Exporters (Q2/06)

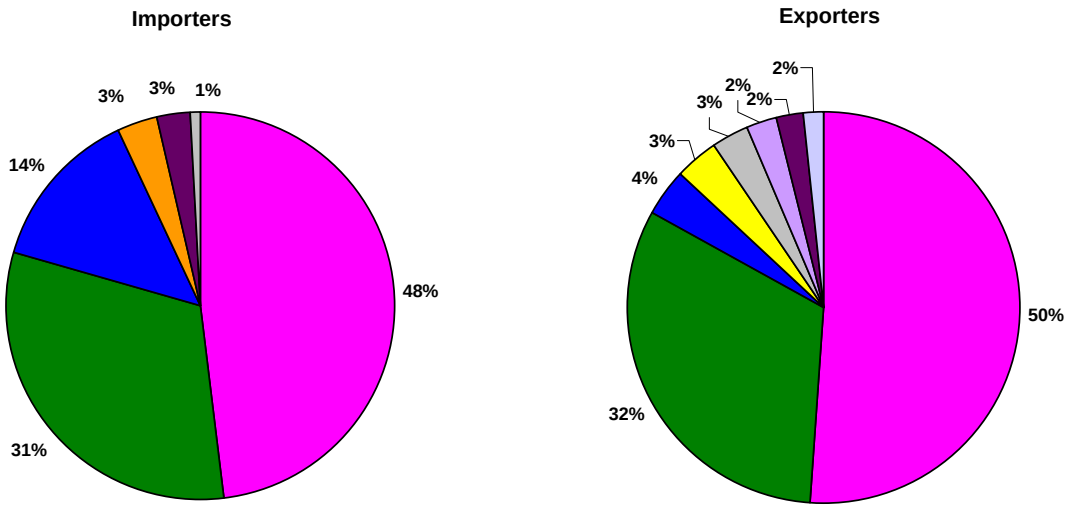


Figure 10 - Tie Line Utilization (Q2/06)

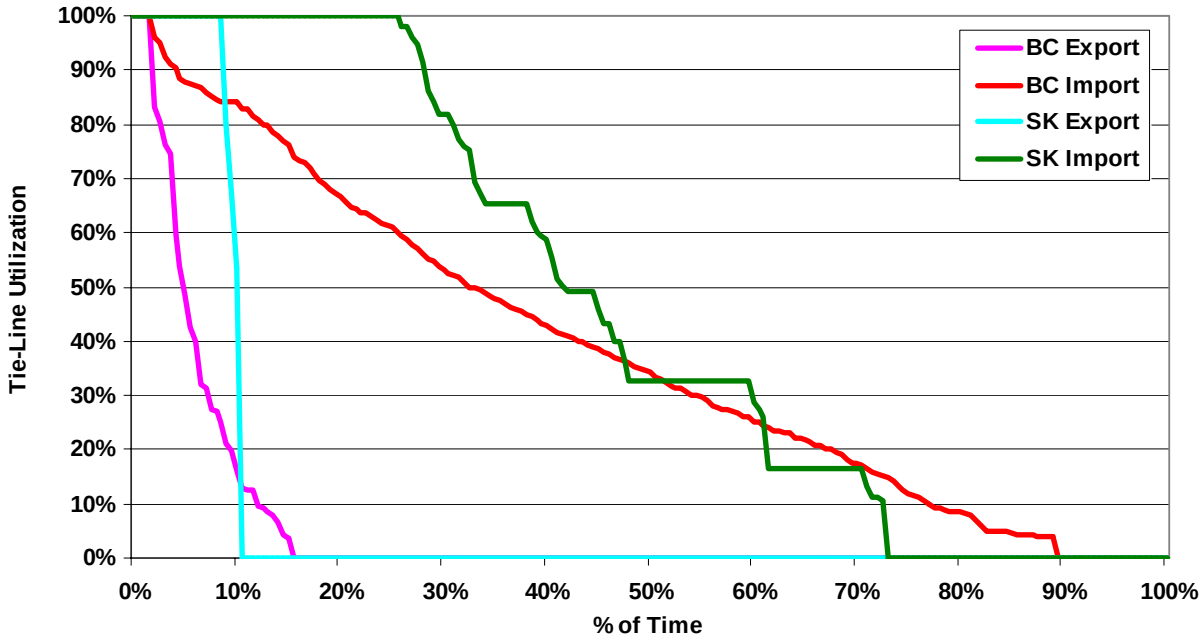


Figure 11 - Imports with Trade-weighted Prices

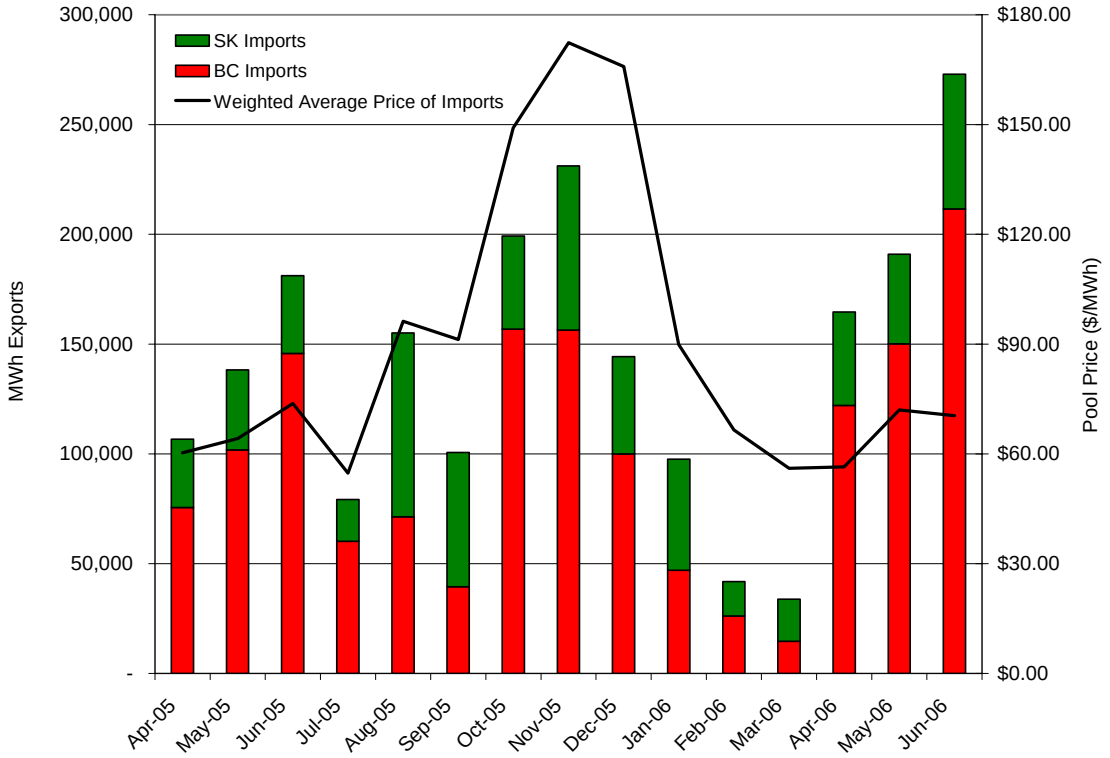


Figure 12 - Exports with Trade-weighted Prices

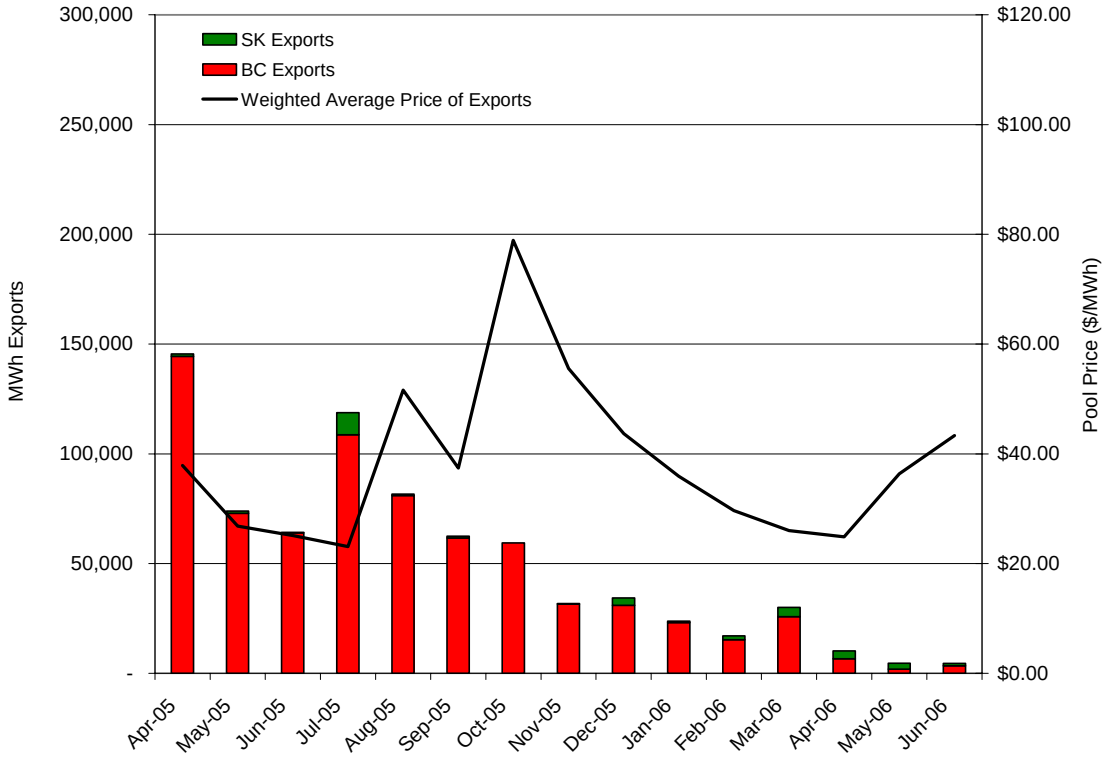


Figure 13 - On-Peak Prices in Other Markets

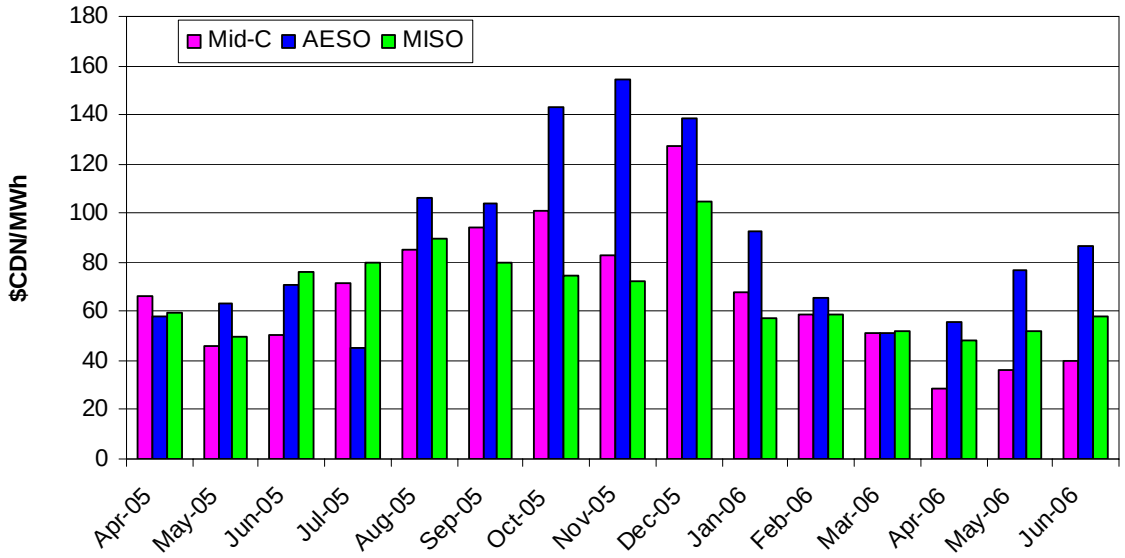
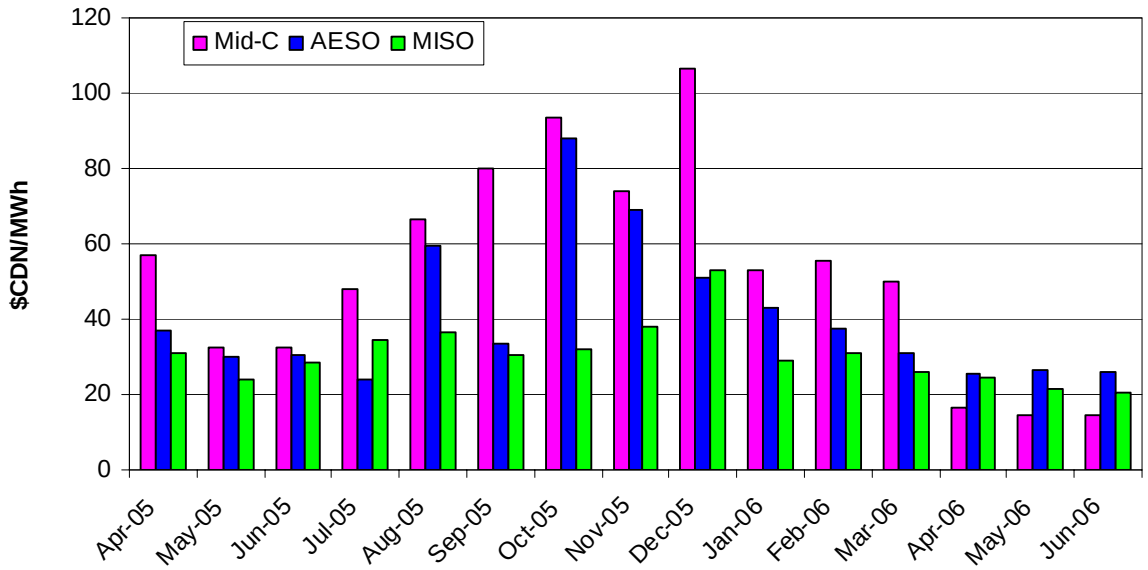


Figure 14 - Off-Peak Prices in Other Markets



4 APPENDIX C – ANCILLARY SERVICES MARKET METRICS

Ancillary services are the system support services that ensure system stability and reliability. The Alberta Interconnected Electric System (AIES) is required to carry sufficient reserves in order to assist in the recovery of any unexpected loss of generation or an interconnection. Reserves are competitively procured by the AESO through the Alberta Watt-Exchange (Watt-Ex) and over the counter (OTC). Standard ancillary services products (contracts) include active and standby products for each of Regulating, Spinning, and Supplemental reserves. The majority of active reserve products are indexed and settled against Pool price prevailing during the contract period. Standby reserve products are priced in a similar manner to options with a fixed premium and an exercise price (activation price). The activation price is only paid in the event that the contract is activated.

Figure 15 - Active Settlement Prices - All Markets (Watt-ex and OTC)

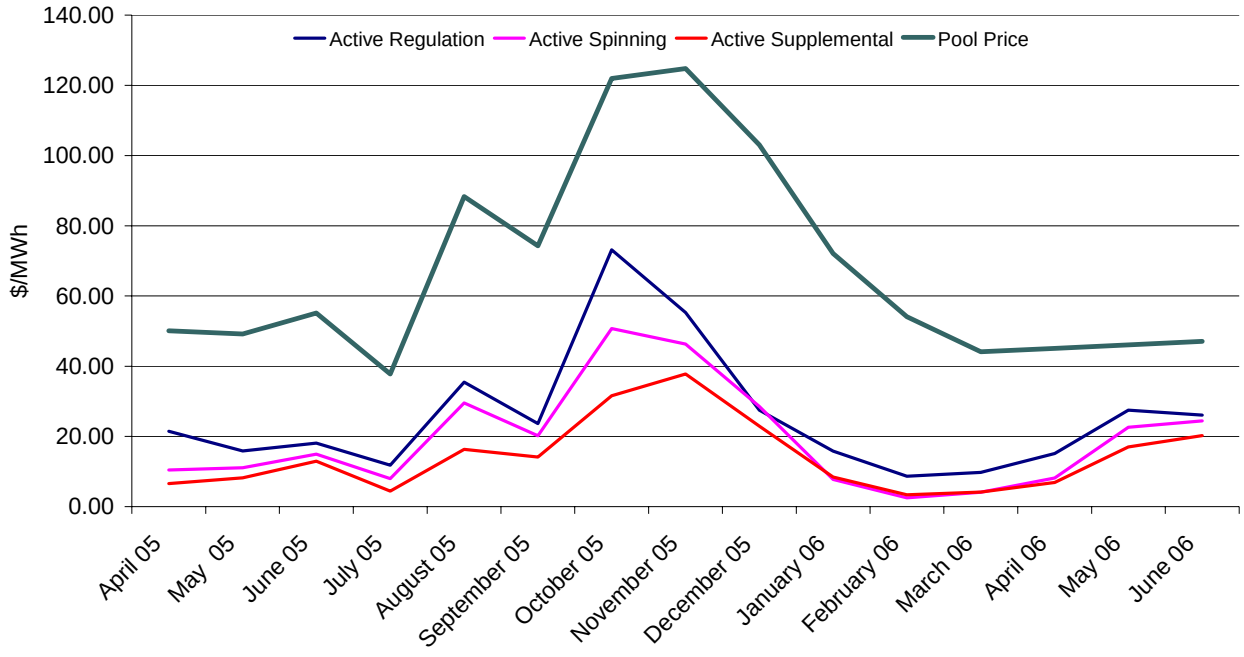


Figure 16 - Standby Premiums - All Markets (Watt-ex and OTC)

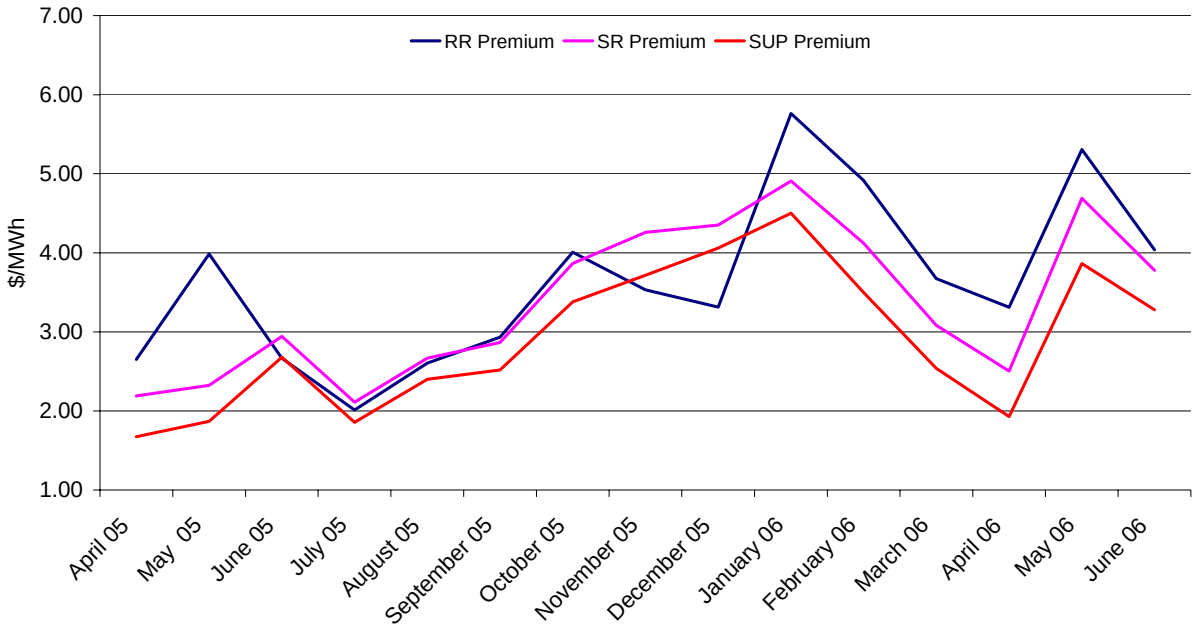


Figure 17 – Activation Prices – All Markets (Watt-ex and OTC)

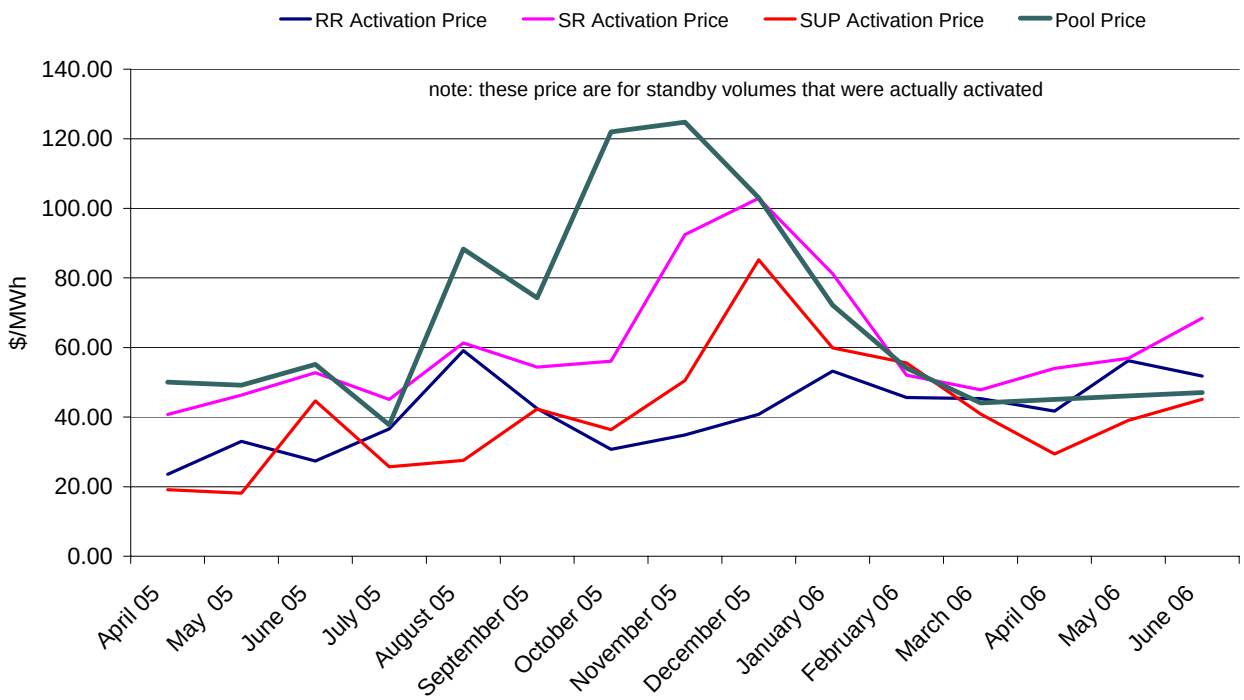


Figure 18 - Standby Activation Rates

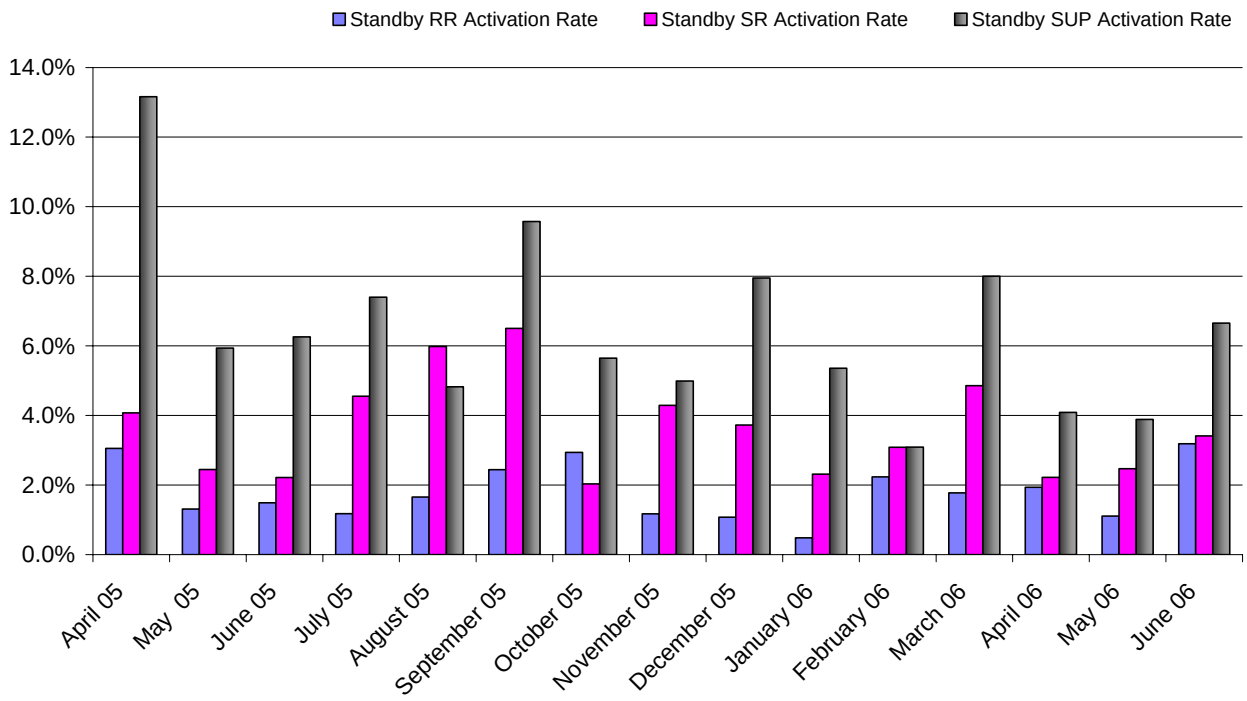


Figure 19 - OTC Procurement as a % of Total Procurement

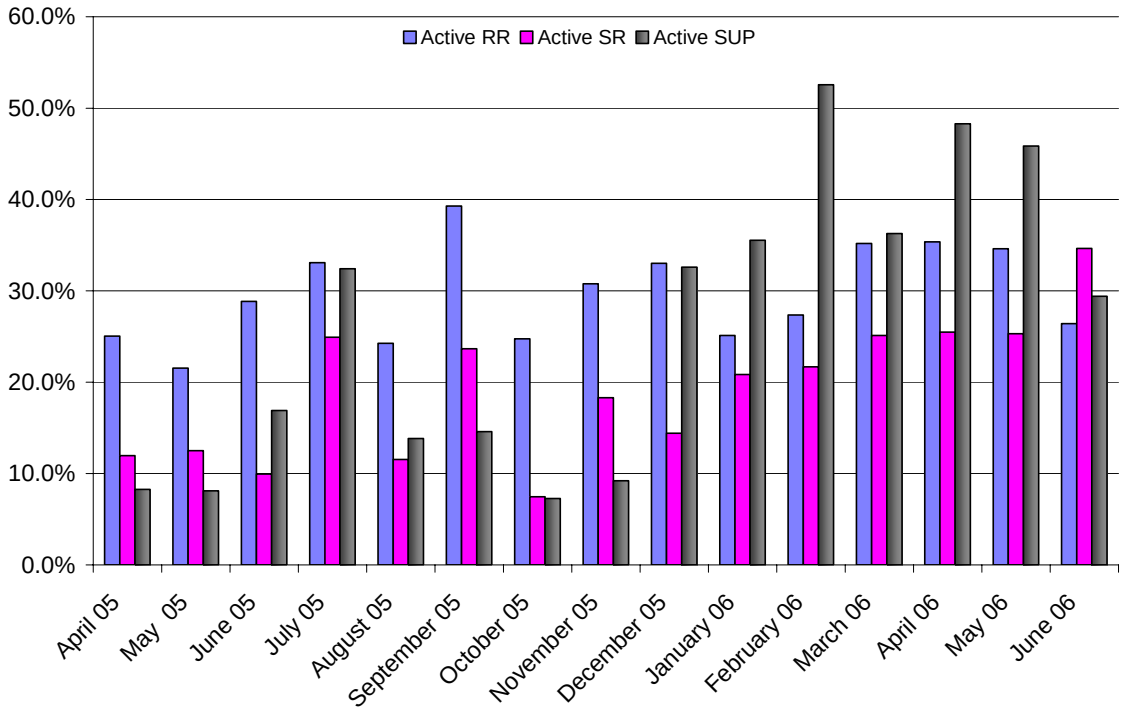


Figure 20 - Active Regulating Reserve Settlement by Market

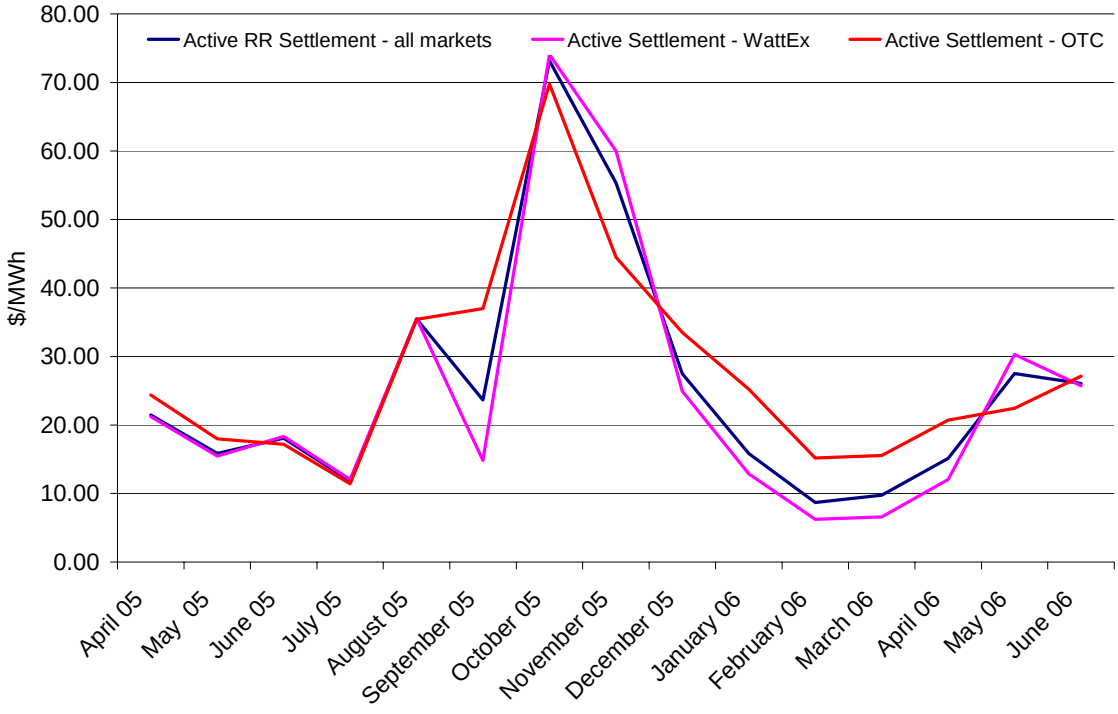


Figure 21 - Active Spinning Reserve Settlement Price by Market

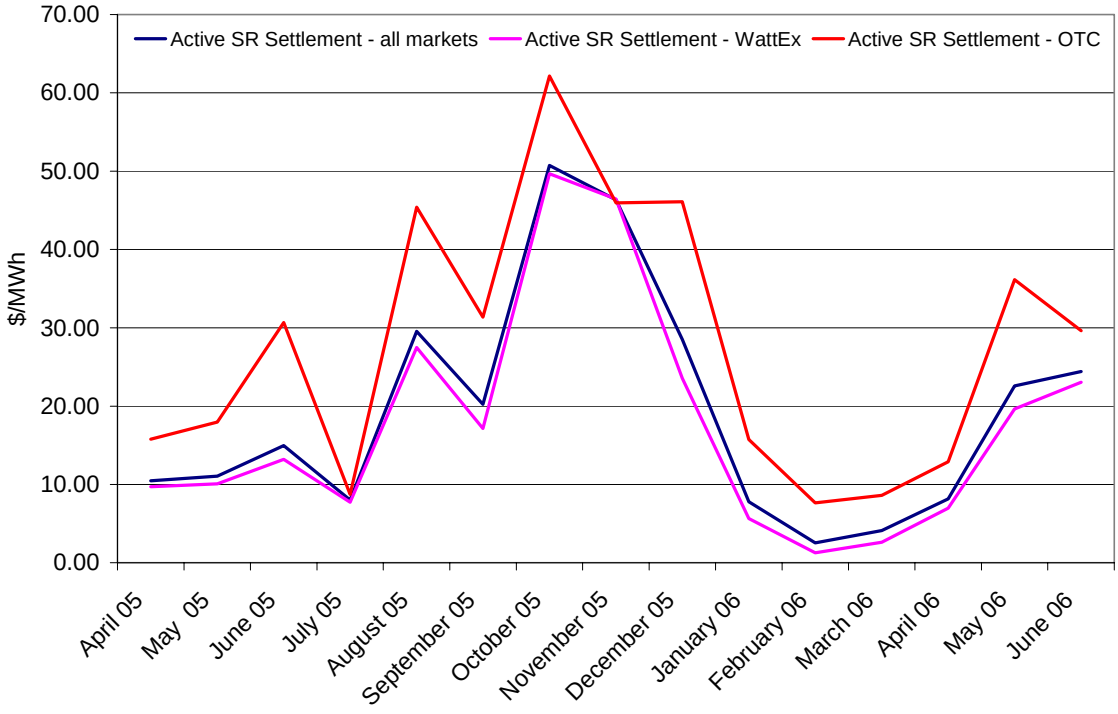


Figure 22 - Active Supplemental Reserve Settlement Price by Market

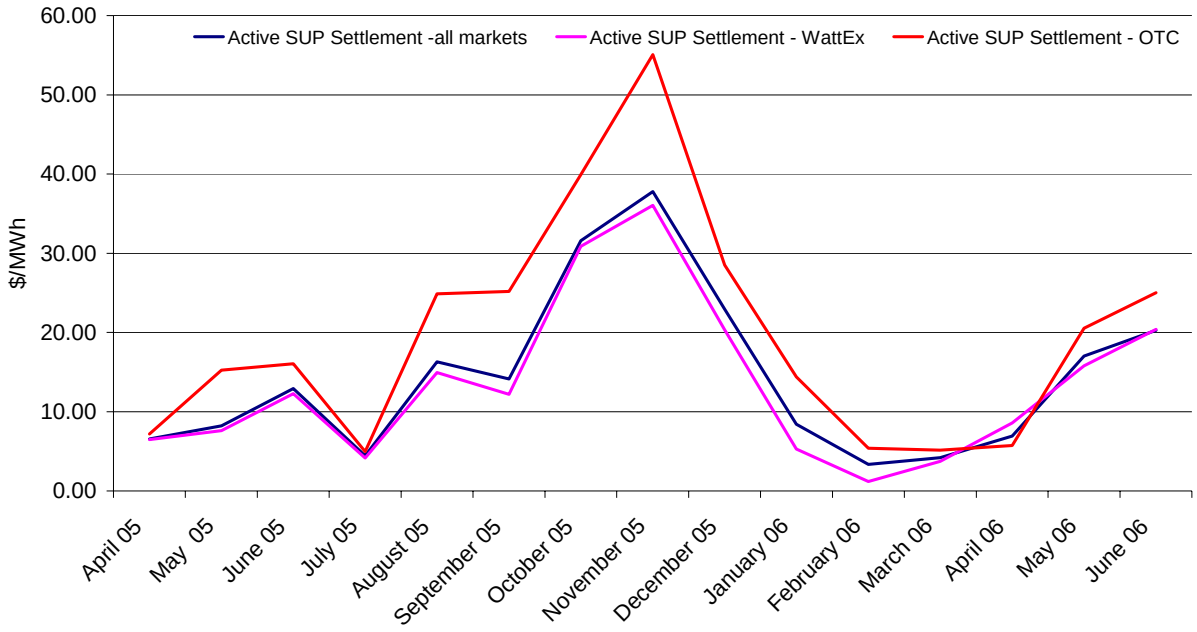


Figure 23 – Active Regulating Reserve Market Share by Fuel Type

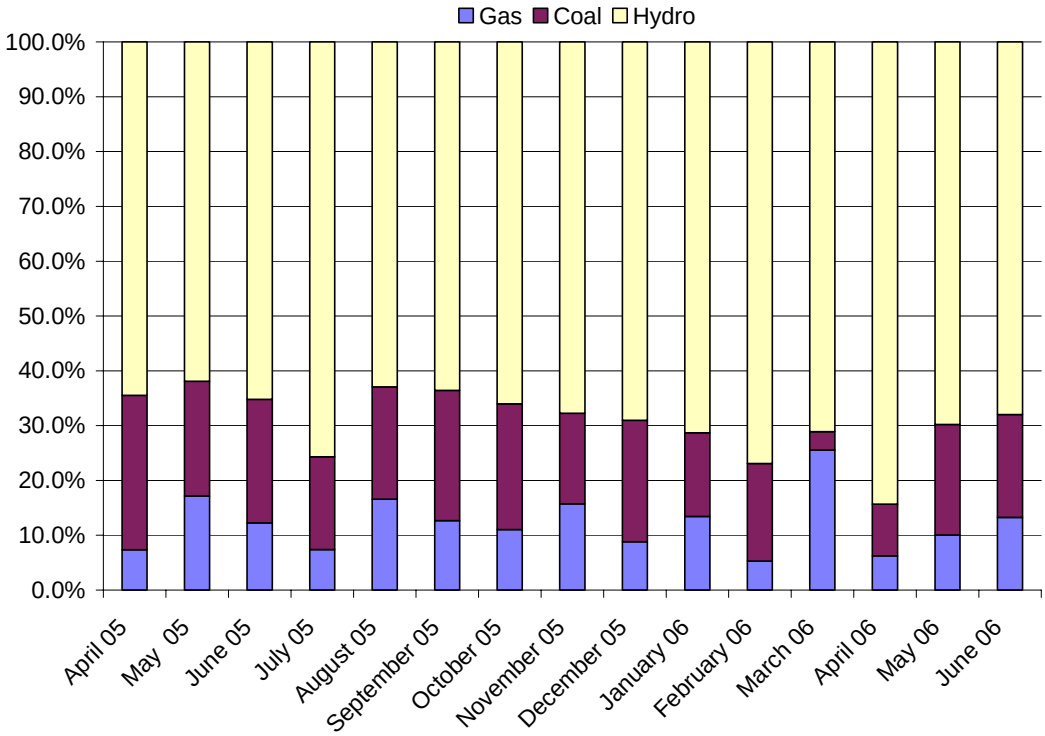


Figure 24 – Active Spinning Reserve Market Share by Fuel Type

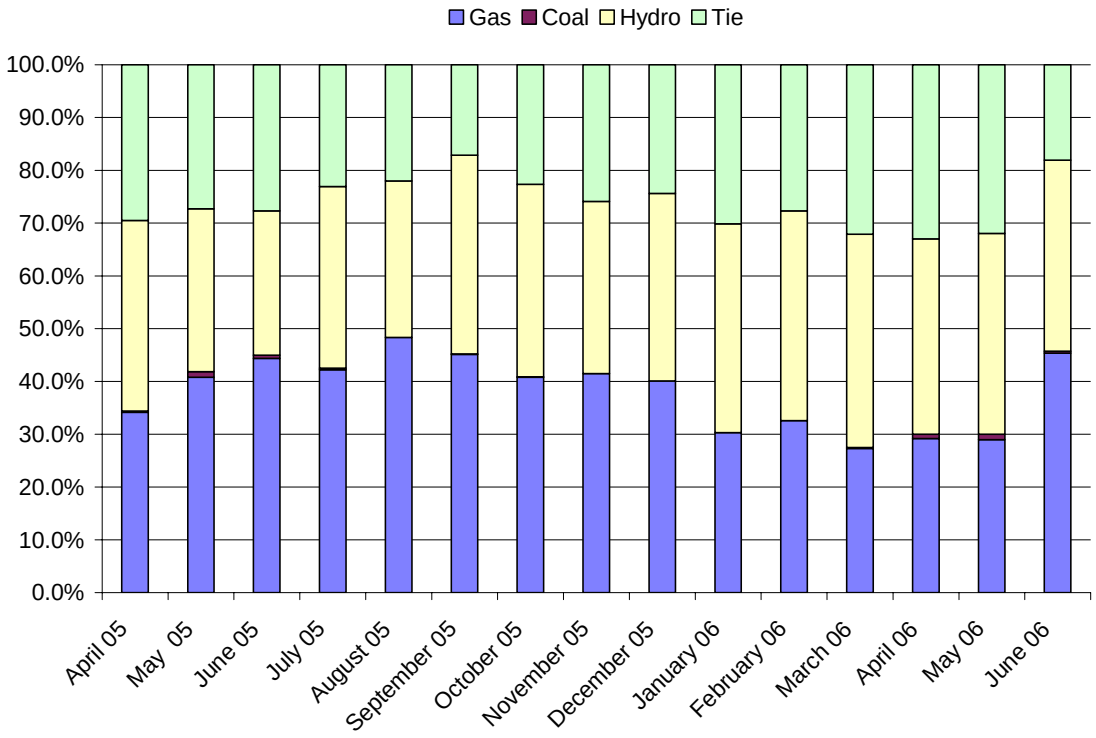


Figure 25 – Active Supplemental Reserve by Fuel Type