Market Operations

Monthly Service Provider Report

December 2011

This report details monthly information in relation to the wholesale information & trading system, clearing manager and pricing manager functions performed by NZX under contract to the Electricity Authority.

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Introduction

1.1 Purpose

This report details monthly information in relation to the wholesale information & trading system, clearing manager and pricing manager functions performed by NZX under contract to the Electricity Authority.

This report has been prepared in accordance with Electricity Industry Participant Code 2010 and contains the core reporting requirements plus additional market information that will be of interest to the Board.

1.2 Contact Details

The following is a list of contact details for further information or questions pertaining to this report:

WITS Market Information System
David Godfrey, Information Technology Manager +64 4 498 0048

Service Operations
Steve Torrens, Senior Energy Analyst +64 4 471 4394

2. Core Reporting

2.1 Compliance with Regulations and Code

To the best of our knowledge the WITS, clearing manager and pricing manager service providers fully complied with the Code and regulations in December 2011.

2.2 Operation of the Regulations and Code

For this month, the NZX service providers have not identified any areas of the Code that require addressing.

2.3 Compliance with Service Provider Agreements

All provisions of the WITS, clearing manager and pricing manager service provider agreements have been adhered to during the reporting month.

2.4 Compliance with Agreed Performance Standards

2.4.1 Wholesale Information & Trading System Manager (WITS/COMIT)

Measure	Achieved This Month	Standard
WITS/COMIT availability	100%	99.72%
WITS/COMIT Electricity Info Module availability	100%	90%
WITS/COMIT Risk Contract Mgmt Module availability	100%	90%
WITS/COMIT 6-month availability	99.99%	99.72%
WITS/COMIT file upload availability	100%	99.72%
Average time to publish PDS	2min 51secs	7mins
Average time to publish dispatch prices	23secs	1min
Average time to publish provisional/final prices	23secs	1min 30secs

The target level of 99.72% relates to the equivalent of no more than two hours of outages per calendar month. Core functionality denotes all the systems and facilities necessary to fulfil the wholesale information system requirements of the Code as part of the Wholesale Information & Trading System service provider agreement.

2.4.2 Clearing Manager

Measure	Achieved This Month	Standard
Wash-up notifications distributed to parties by 5th business day of each month	Yes	92%
Invoices released by 6pm on 9th business day	Yes	92%
Constrained on/off amounts released to System Operator by 9am on 8th business day	Yes	92%
Number of invoice calculation errors	0	0
Number of security level calculation errors	0	0

The target level of 92% relates to the equivalent of no more than one instance of missing the deadline within a twelve-month period. The zero standards indicate that the Board expects there to be no calculation errors, in either invoices or the establishment of security levels.

2.4.3 Pricing Manager

Measure	Achieved This Month	Standard
Provisional prices to be published before 10:22am, provided input information received by 07:30	100%	No more than one late publication in a rolling 3 month period
Interim prices to be published before 9:22am, if no provisional price situation exists provided input information received by 7:30	All	No more than one late publication in a rolling 3 month period
A price that has been published as provisional should be republished as interim on the same day that a revised notice is received, provided that notice is received before 3pm	All	No more than one late publication in a rolling 3 month period
IT processing time to publish final prices within 3 minutes 15 seconds of sending	100%	97%
Number of price processing errors	0%	0%

3. Additional Information

3.1 IT Systems

3.1.1 Outage Summary

There was one planned Transpower outage for an hour on the 20th December to carry out an inter-site switchover from Hamilton to Wellington.

3.1.2 Code Change Implementations

- NZX Energy is working on DSBF code change implementations.
- NZX is helping the EA and SO scope the Dispatchable Demand and Scarcity Pricing projects.
- MRDA has completed development and is due for market testing in quarter one 2012, prior to release.

3.1.3 Minor System Changes

During the month a number of minor maintenance changes were made to WITS and CHASM systems.

3.1.4 Other Work

Work is being carried out on the following:

- Working through the WITS Vision with the Electricity Authority
- Pro-active investigation into future web service options
- Part 14 review
- Revision of the WITS user agreement
- Liaising with System Operator around the HVDC and PTPIX projects
- Investigation into March 26th pricing options

Work is scheduled for:

- EA Rebranding

3.2 Clearing Manager

3.2.1 Invoicing and Settlement

Monthly settlement (November 2011 billing period settled on December 20):

Amounts Received

Received from Payers	$230,699,251.36

Amounts Paid

Paid to Payees	$226,754,696.83
Loss and Constraint Excess	$3,944,553.21

Total Settlement Volumes

Payer Volumes (MWhs)	3,257,984
Payee Volumes (MWhs)	3,360,973

Total settlement (1 April 04 to 30 November 2011):

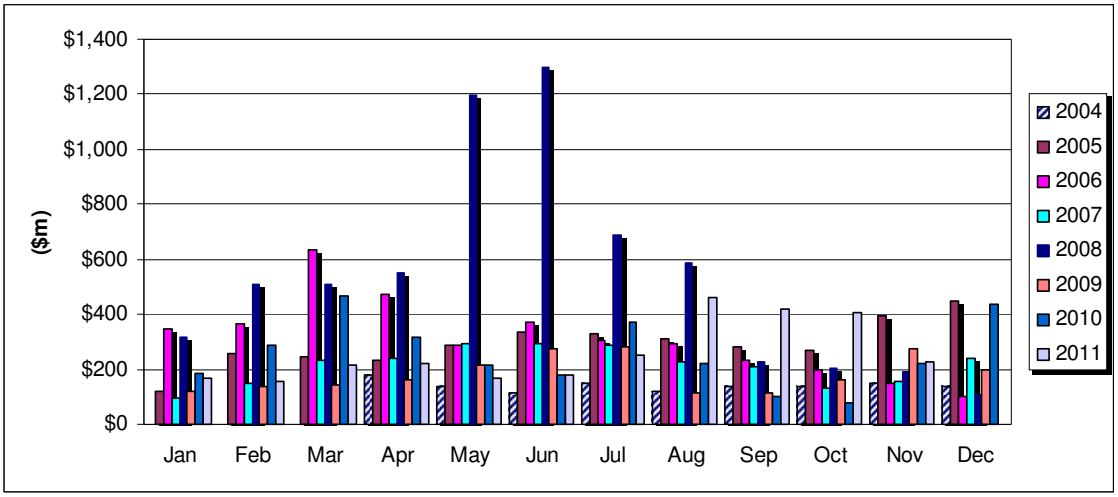
Amounts Received

Received from Payers	$25,821,761,220.12

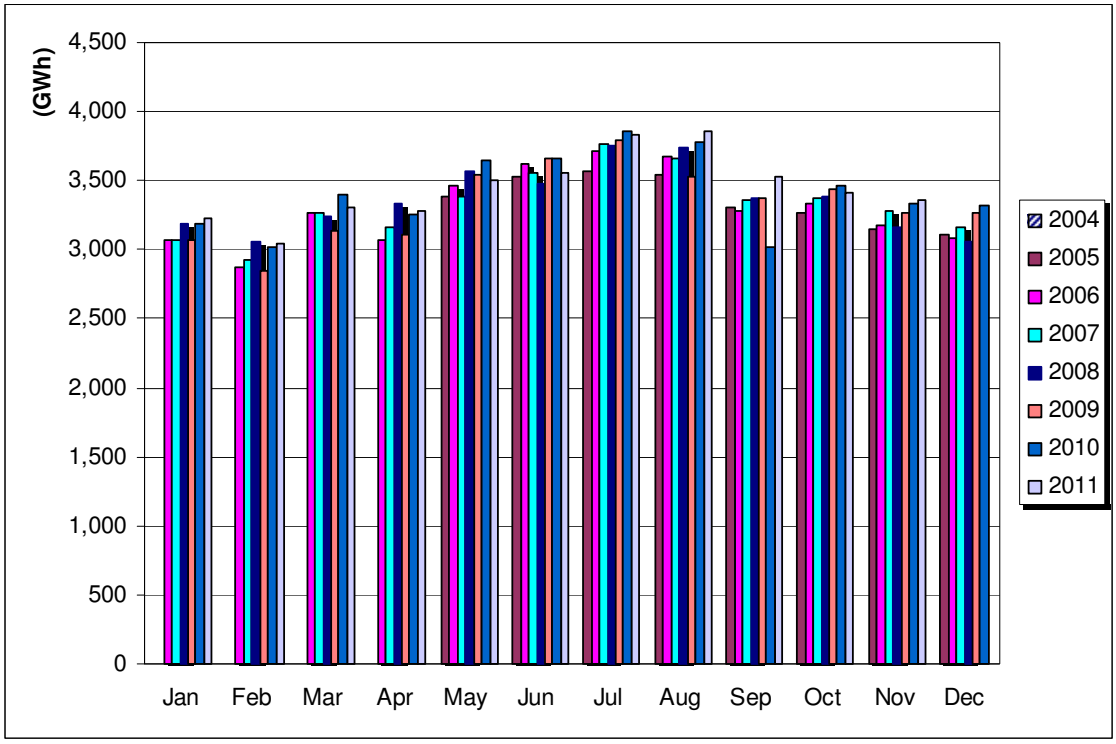
Amounts Paid

Paid to Payees	$25,073,376,299.61
Loss and Constraint Excess	$748,337,185.19

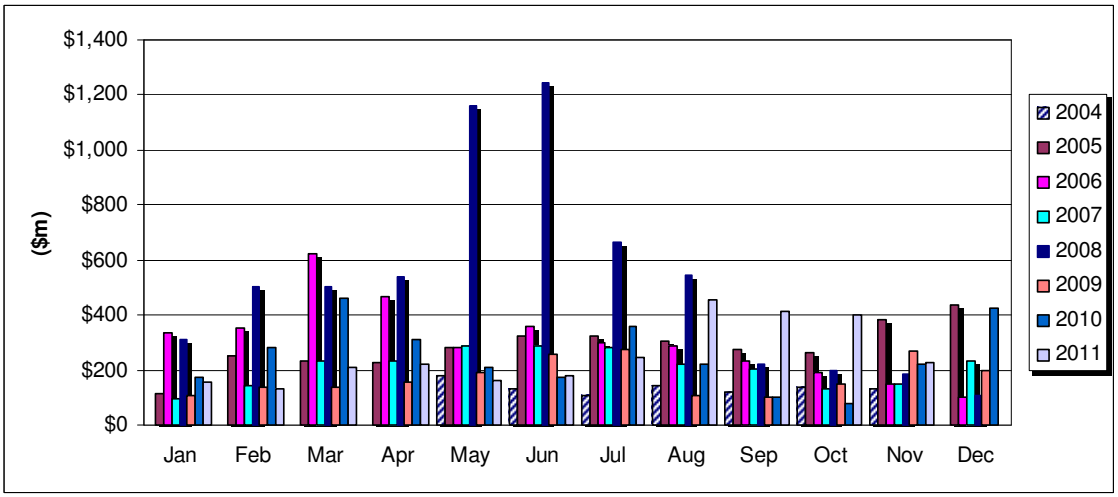
Graphically, total payer settlement since April 2004 is as follows:



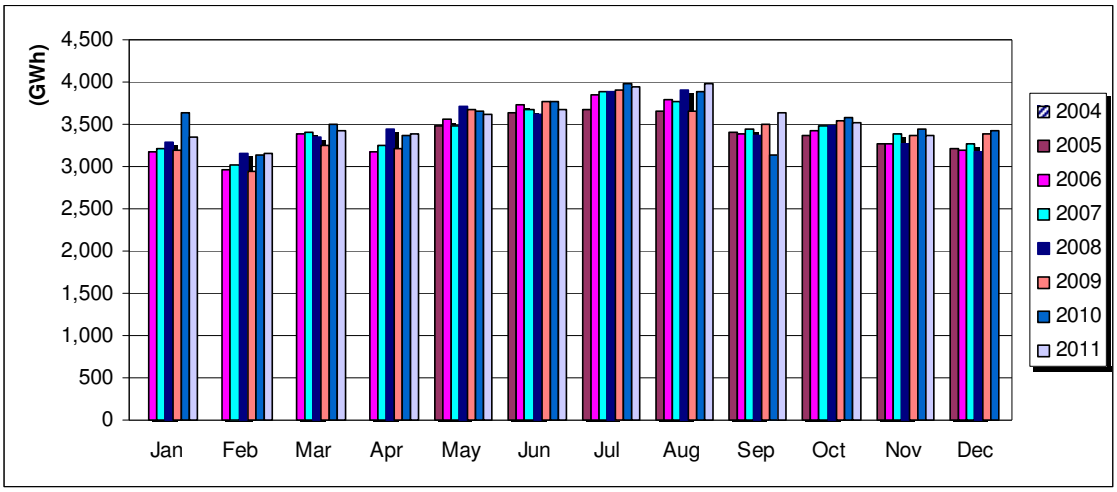
Total payer volumes since May 2005 are as follows:



Total payee settlement since April 2004 is as follows:



Total payee volumes since May 2005 are as follows:



3.2.2 Security Monitoring

At the end of December 2011 the clearing manager held security of $251,049,089.36 with the total net projected exposure to 27 January 2012 estimated at $110,200,592.05.

There were seven calls for security and two reductions in security in December.

3.2.3 Ancillary Services

Payments to Ancillary Services Agents in December 2011 for the November 2011 billing period totalled $3,359,638.30. That amount was made up of the following:

Type	Amount (GST incl.)
Black Start	$52,699.70
Over-frequency Reserve	$112,415.44
Frequency Keeping	$1,855,952.12
Instantaneous Reserve	$555,133.54
Voltage Support	$783,437.50

Further details and historical and graphical information regarding ancillary services can be found in the system operator monthly service provider report at: http://www.ea.govt.nz/industry/pso-cq/system-operations/system-operator-reports/system-operator-monthly-reports/

3.2.4 Constrained on

Total constrained on amounts for the November 2011 billing period were $383,922. These amounts were paid to generators by the clearing manager and the system operator on the November 2011 invoices issued in December 2011.

3.2.5 Constrained off

Total constrained off amounts for the November 2011 billing period were $943,527. Only constrained off amounts that are attributable to the system operator are paid to generators.

3.2.6 Must Run Dispatch Auction

There were standing bids in the must run dispatch auction every trading day throughout December 2011. In addition to this, both the night and the day auctions fully cleared at a price of $0.01 for every day of the month. There were four revised bids received during the month; two for the day auction, and two for the night auction.

3.2.7 Other Work

During December 2011, the clearing manager successfully transitioned settlement and prudential security banking facilities to ANZ. The most pleasing part of the transition was that all participants paid into the new bank account by 1400 hours of settlement day.

Pricing Manager

3.2.8 Daily Pricing Statistics

For December 2011, the pricing manager performed 50 pricing solves. There were 8 solves that were not published, 12 solves published as provisional and 31 published as final.

Pricing Situations that occurred in December were:

Infeasibility Situations	Metering Situations	High Spring Washer Price Situations	SCADA Situations
14	9	1	0

Publication time for interim prices in December:

Publication category	Number of cases
1st solve published same day before 9:22	15
2nd solve published same day before 12:00	4
2nd solve published same day before 17:00	4
2nd solve published 1st business day following weekend provisional	3
2nd solve delayed more than one business day	0

3.2.9 Price Commentary

Average monthly prices have increased across the country over the past two months. The average price at Haywards throughout December was $75.02/MWh, up from $58.92/MWh in November.

An outage at Huntly power station caused North Island prices to peak on the 13 December.

National hydro storage increased by 0.97% last month to finish at 2,702GWh. This level is 91.6% of long run historical averages for this time of year. Average daily hydro inflows for December were 471.36GWh/wk.

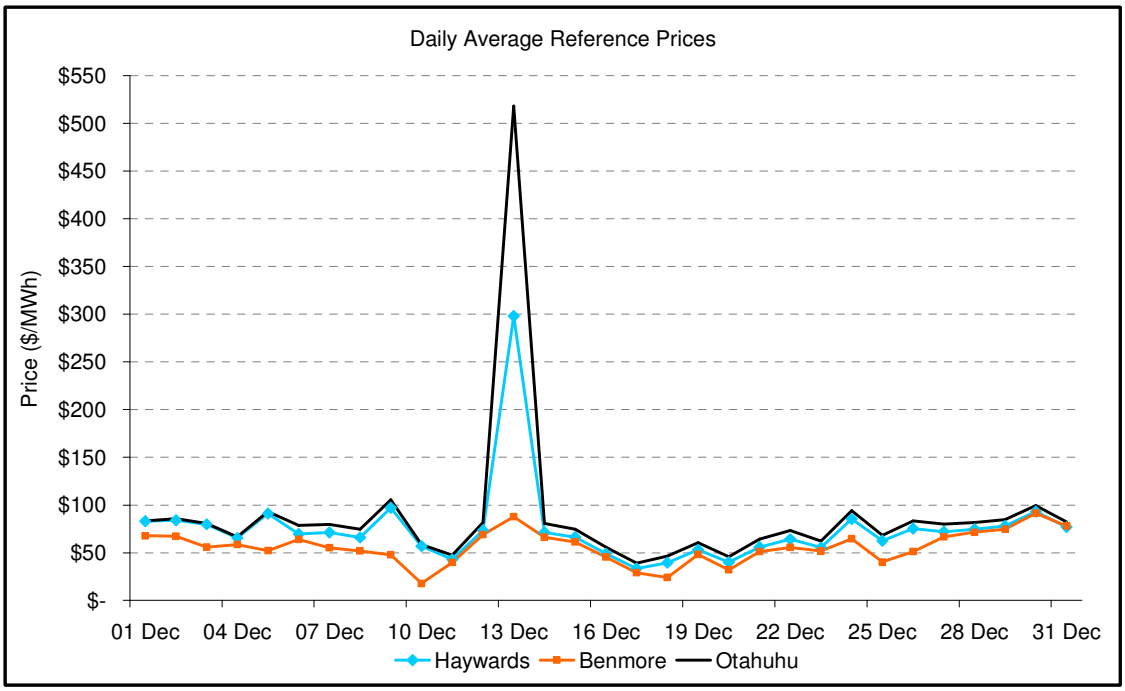
3.2.10 Monthly Average Reference Price Summary

Monthly Summary	*December-11*		
Haywards (HAY2201)	**Forecast**	**Dispatch**	**Final**
Average Price:	$ 91.01	$ 86.94	$ 75.02
Highest Price:	$ 848.73	$ 4,994.59	$ 4,667.10
Lowest Price:	$ 0.02	$ 0.01	$ 0.02
Half Hours > $100:	347	123	135
Average Weekday (excl stats):	$ 90.94	$ 99.42	$ 81.31
Average Weekend (incl stats):	$ 83.92	$ 53.41	$ 61.72
Benmore (BEN2201)	**Forecast**	**Dispatch**	**Final**
Average Price:	$ 64.65	$ 51.76	$ 56.05
Highest Price:	$ 141.83	$ 131.35	$ 424.70
Lowest Price:	$ 0.02	$ 0.04	$ 0.04
Half Hours > $100:	81	17	33
Average Weekday (excl stats):	$ 67.47	$ 55.83	$ 60.88
Average Weekend (incl stats):	$ 51.58	$ 35.77	$ 45.79
Otahuhu (OTA2201)		**Dispatch**	**Final**
Average Price:		$ 223.00	$ 88.05
Highest Price:		$ 185,572.87	$ 8,028.45
Lowest Price:		$ 0.01	$ 0.02
Half Hours > $100:		173	185
Average Weekday (excl stats):		$ 298.00	$ 98.23
Average Weekend (incl stats):		$ 57.63	$ 58.67

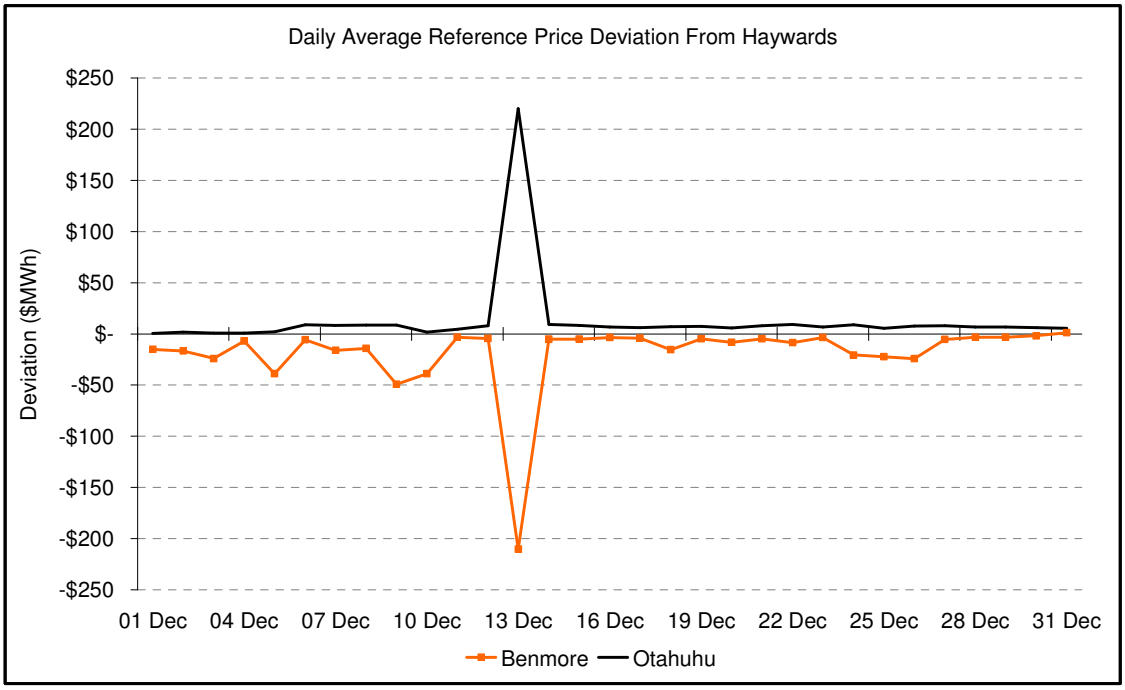
Note: Forecast prices for Otahuhu are not published

	Dec-11	Nov-11	Change
BEN2201	56.05	52.54	7%
HAY2201	75.02	58.92	27%
OTA2201	88.05	62.98	40%

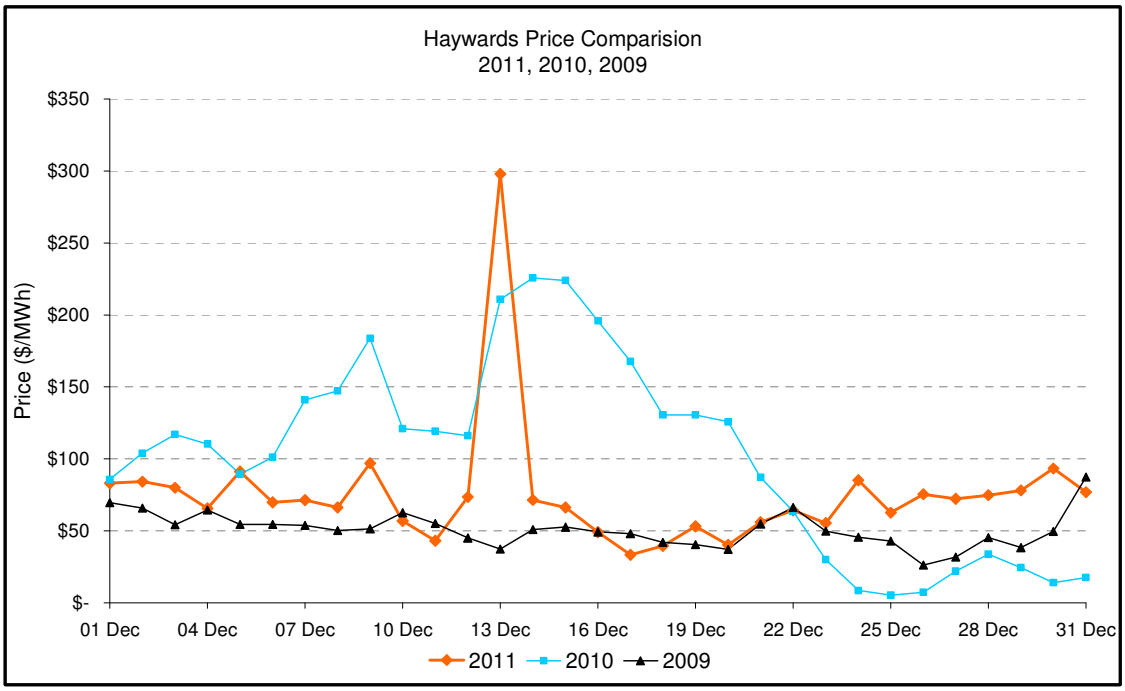
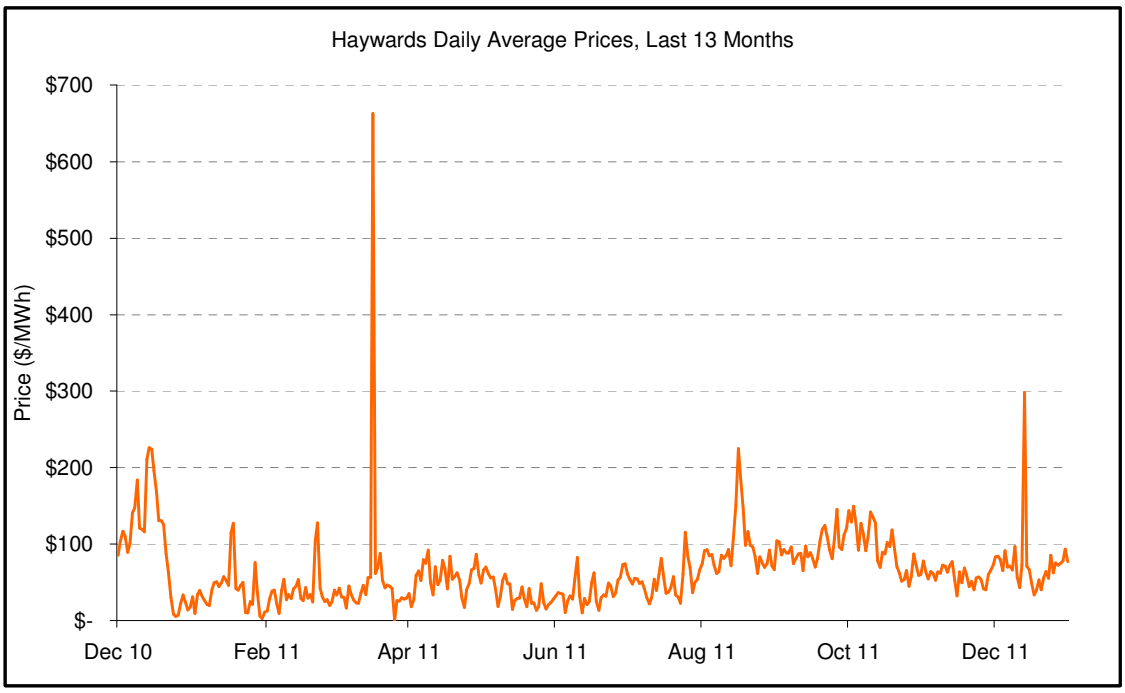
3.2.11 Daily Average Reference Price Graph



3.2.12 Daily Average Reference Price Deviation from Haywards



3.2.13 Daily Average Haywards Price Comparison



3.2.14 Haywards 13 Month Daily Average Price Comparison