

Market Operations Monthly Service Provider Report



July 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 pricing manager and WITS NZX service providers fully complied with the Code and regulations in July 2011.

The clearing manager published constrained amounts later than the timeline specified in Rule 13.206 of the Code. This was a consequential breach following the failure of a participant to notify the clearing manager of changes to a block dispatch agreement.

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

With the exception of the self reported breach described in section 2.1, all provisions of the service provider agreement 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	100%	99.72%
WITS/COMIT file upload availability	100%	99.72%
Average time to publish PDS	2min 21secs	7mins
Average time to publish dispatch prices	22secs	1min
Average time to publish provisional/final prices	19secs	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 8 th business day	No*	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.



*See the July 2011 Clearing Manager's report for more detail.

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	AII	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	AII	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 on the 28th July to carry out maintenance patching of the market system.

3.1.2 Code Change Implementations

NZX Energy is working with the System Operator around DSBF code change implementations.

NZX is helping the EA with the scoping of the Dispatchable Demand and Scarcity Pricing projects.

3.1.3 Minor System Changes

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

3.1.4 Other Work

Work is being carried out on the following:

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

Work has been completed on:

Cross Midnight Querying

Work is scheduled for:

EA Rebranding



3.2 Clearing Manager

3.2.1 Invoicing and Settlement

Monthly settlement (June 2011 billing period settled on July 20):

Amounts Received

Received from Payers \$182,687,658.11

Amounts Paid

Paid to Payees \$177,383,564.03 Loss and Constraint Excess \$5,304,092.53

Total Settlement Volumes

Payer Volumes (MWhs) 3,550,469 Payee Volumes (MWhs) 3,666,557

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

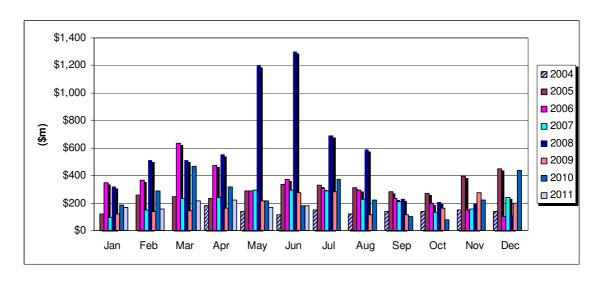
Amounts Received

Received from Payers \$24,048,205,160.40

Amounts Paid

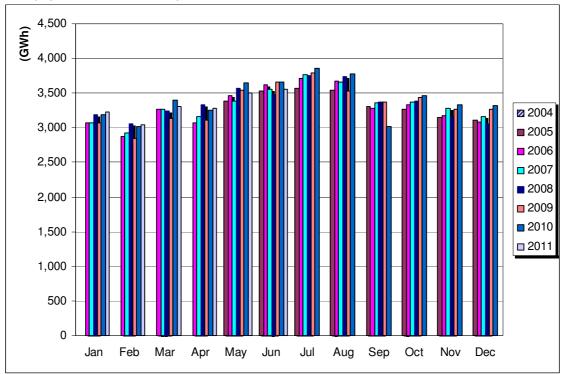
Paid to Payees \$23,333,083,830.54 Loss and Constraint Excess \$715,073,601.55

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

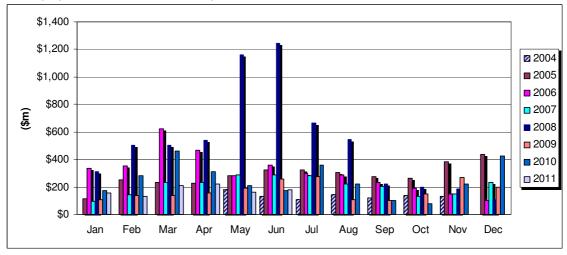




Total payer volumes since May 2005 are as follows:

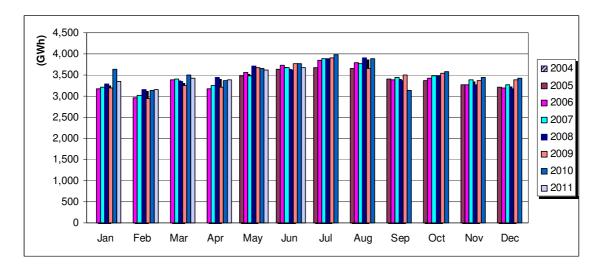


Total payee settlement since April 2004 is as follows:





Total payee volumes since May 2005 are as follows:



3.2.2 Security Monitoring

At the end of July 2011 the clearing manager held security of \$243,110,685.81 with the total net projected exposure to 29 August 2011 estimated at \$80,468,680.36.

There were five calls for security and three reductions in security in July.

3.2.3 Ancillary Services

Payments to Ancillary Services Agents in July 2011 for the June 2011 billing period totalled \$6,457,012.13. That amount was made up of the following:

Туре	Amount (GST incl.)
Black Start	\$52,699.70
Over-frequency Reserve	\$112,415.44
Frequency Keeping	\$4,170,619.41
Instantaneous Reserve	\$1,340,921.45
Voltage Support	\$780,356.13

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

3.2.4 Constrained on

Total constrained on amounts for the June 2011 billing period were \$3,158,374. These amounts were paid to generators by the clearing manager and the system operator on the June 2011 invoices issued in July 2011.



3.2.5 Constrained off

Total constrained off amounts for the June 2011 billing period were \$782,211. 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 during July 2011. Over the course of the month, seven updated bids were received for the night auction and one was received for the day auction. Both the night and the day auctions fully cleared at a price of \$0.01 for every day of June.



3.3 Pricing Manager

3.3.1 Daily Pricing Statistics

For July 2011, the pricing manager performed 54 pricing solves. There were 12 solves that were not published, 12 solves published as provisional and 31 published as final. There were no claims of pricing errors.

Pricing Situations that occurred in April were:

Infeasibility	Metering	High Spring Washer	SCADA
Situations	Situations	Price Situations	Situations
4	20	0	0

Publication time for interim prices in April:

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

3.3.2 Price Commentary

Average prices increased throughout July across all three major reference nodes. The average price for the month at Haywards was \$50.99/MWh, up from \$38.46/MWh in June.

National demand climbed to a twelve month high on the 25th of July, peaking at 126,574 MWh. However, as was the case in June average demand sat at levels below those observed throughout the same period in 2010. Average prices at Benmore exceeded those at Otahuhu for the month by \$1.29/MWh.

National hydro storage fell by 7.4% last month to finish at 2,533 GWh. This level is 4.3% above long run historical averages for this time of year. Average inflows for



July increased by 1.8% to 442GWh/wk from average inflows observed during June 2011.

3.3.3 Monthly Average Reference Price Summary

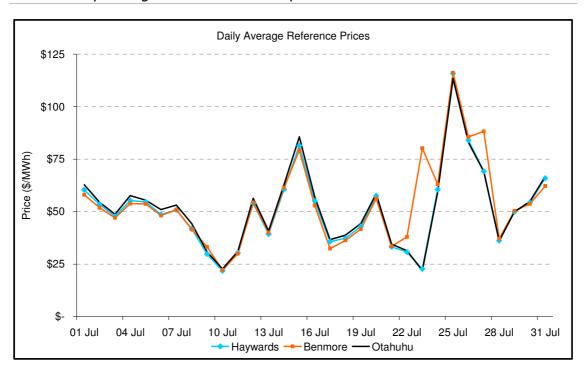
Monthly Summary		July-11		
Haywards (HAY2201)		Forecast	Dispatch	Final
Average Price:	\$	47.95	\$ 44.16	\$ 50.99
Highest Price:	\$	150.24	\$ 199.89	\$ 168.87
Lowest Price:	\$	0.01	\$ 0.01	\$ 0.01
Half Hours > \$100:		11	42	51
Average Weekday (excl stats):	\$	46.12	\$ 47.11	\$ 53.98
Average Weekend (incl stats):	\$	51.79	\$ 37.95	\$ 44.69
Benmore (BEN2201)		Forecast	Dispatch	Final
Average Price:	\$	49.50	\$ 46.17	\$ 53.30
Highest Price:	\$	131.25	\$ 174.64	\$ 159.42
Lowest Price:	\$	0.03	\$ 0.03	\$ 0.03
Half Hours > \$100:		33	68	84
Average Weekday (excl stats):	\$	46.51	\$ 47.82	\$ 54.94
Average Weekend (incl stats):	\$	55.76	\$ 42.69	\$ 49.85
Otahuhu (OTA2201)			Dispatch	Final
Average Price:			\$ 45.21	\$ 52.01
Highest Price:			\$ 216.16	\$ 167.97
Lowest Price:			\$ 0.01	\$ 0.01
Half Hours > \$100:			43	49
Average Weekday (excl stats):			\$ 48.44	\$ 55.20
Average Weekend (incl stats):			\$ 38.42	\$ 45.31

Note: Forecast prices for Otahuhu are not published

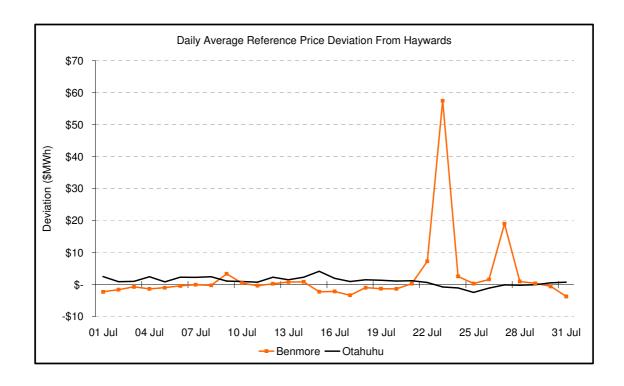
	Jul-11	Jun-11	Change
BEN2201	53.30	33.78	58%
HAY2201	50.99	38.46	33%
OTA2201	52.01	41.83	24%



3.3.4 Daily Average Reference Price Graph

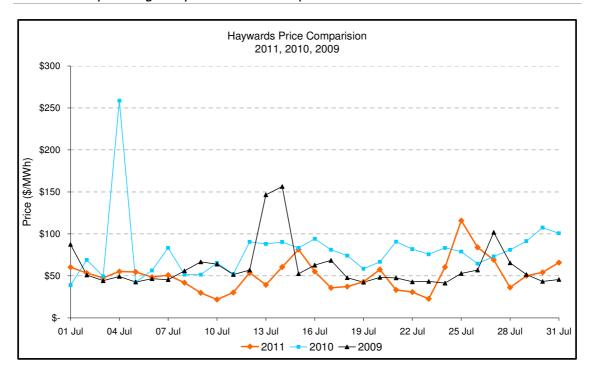


3.3.5 Daily Average Reference Price Deviation from Haywards





3.3.6 Daily Average Haywards Price Comparison



3.3.7 Haywards 13 Month Daily Average Price Comparison

