

Market Operations Monthly Service Provider Report

July 2009

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 Commission.

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1. 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 Commission.

This report has been prepared in accordance with sections 44 and 45 of the Electricity Governance Regulations 2003 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:

General Queries

Shane Dinnan, General Manager Market Operations +64 4 498 0052

WITS Market Information System

David Godfrey, Information Technology Manager +64 4 498 0048

Service Operations

Ashley Milkop, Energy Services Manager +64 4 498 0028

2. Core Reporting

2.1 Compliance with Regulations and Rules

To the best of our knowledge all NZX service providers complied with their obligations under the regulations and rules during the reporting month.

2.2 Operation of the Regulations and Rules

The NZX service providers have not during the reporting month identified any areas where, in their view, a change to the regulations or rules may need to be considered.

2.3 Compliance with Service Provider Agreements

To the best of our knowledge, 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)

WITS availability for the month was slightly below the standard due to outages required to cutover systems to Transpower new MSP system.

WITS processing times have increased because of receiving a marked increase in data post implementation of MSP in 21st July. For example, WITS is now receiving data for 459 nodal locations as opposed to 256 locations prior to MSP implementation.

Measure	Achieved This Month	Standard
WITS/COMIT availability	99.71%	99.72%
WITS/COMIT 6-month availability	99.91%	99.72%
WITS/COMIT file upload availability	99.95%	99.72%
Average time to publish PDS	7min 2secs	7mins
Average time to publish dispatch prices	49secs	1min
Average time to publish provisional/final prices	50secs	1min 30secs
Pre-MSP (1-20th July 2009)		
Average time to publish PDS	3 min 31secs	7mins
Average time to publish dispatch prices	37secs	1min
Average time to publish provisional/final prices	24secs	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 EGRs 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%
Amounts payable to payees sent through to the bank by 5:30pm on settlement 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

The price publication process has changed with the new market system. It now takes about 12 minutes from submitting prices for publication in Transpower's Market Operator Interface (MOI) until the prices are published on WITS. Of this, it takes about 3 minutes from prices being received from Transpower until they are published on WITS. We expect this publication delay will decrease once Transpower implements filters to reduce the number of nodes for which prices are sent (from 459 down to 256 prior to MSP).

The first trading period under the new market system was 11:30 on 21 July. The first day of final price operations with the new system was 22 July, on which the pricing manager published two sets of final prices for 21 July: trading periods 00:00 – 11:00 with the old system, and 11:30 – 23:30 with the new system

On the afternoon of 21 July the pricing manager inadvertently published shadow prices for 19 and 20 July. Final prices had already been published for these days.

Prior to go-live, shadow test prices were calculated in the new system and published to a test site. The pricing manager was not notified when the publication redirect was made.

On 22 July the market was notified by email and the test prices subsequently removed from COMIT, COMIT Free to Air and Transpower databases.

Measure	Achieved This Month	Standard
Final prices published by 9:22am if no provisional price situation exists	100%	97%
Provisional prices published by 10:22am if provisional price situation exists	100%	97%
Final prices published within 2 hours 30 minutes of a System Operator/Grid Owner fix to a provisional price situation	100%	97%
IT processing time to publish final prices within 3 minutes 15 seconds of sending	100%	97%
Number of price processing errors	0%	0%

The target level of 97% relates to the equivalent of no more than one instance of missing a listed deadline within a calendar month. The zero percent standard indicates that the Board expects there to be no errors caused by the pricing manager in the calculation of prices.

3. Additional Information

3.1 IT Systems

3.1.1 Outage Summary

There was one planned outage to WITS on the 21st July for the release of MSP and one unplanned Transpower outage on the 24th July to apply patches on the Transpower market systems.

3.1.2 Rule Change Implementations

No rule change implementations were carried out during the month.

3.1.3 Minor System Changes

During the month, a number of minor maintenance changes were made to the WITS and CHASM systems in relation to the implementation MSP.

3.1.4 Other Work

The following other work streams were progressed during the month:

- Work has now started on the WITS System enhancements. This included:
 - WITS-CR04: Historic bids and offers zip files
 - WITS-CR07: Auto refresh on COMIT price screens
 - WITS-CR09: Provision of historic COMIT data
 - WITS-CR10: Infeasibilities data ordering
 - WITS-CR11: Default date change on forecast price screen
 - WITS-CR013: Automated email attachment of MRDA files
- Implementation of a new pricing manager interfaces using Transpower's MSP system, including:
 - Parallel shadow operations (SHOPS) to calculate prices using the old and new systems. This was in part for pricing manager testing and training but also for Transpower to have a full month of prices in the new system to test their month-end processes.
 - Ongoing development of pricing procedures for the new system.

3.2 Clearing Manager

3.2.1 Invoicing and Settlement

Monthly settlement (June 2009 billing period settled on July 20):

Amounts Received

Received from Payers \$278,132,961

Amounts Paid

Paid to Payees \$260,803,979

Loss and Constraint Excess \$17,328,980

Total settlement (1 April 04 to 31 July 2009):

Amounts Received

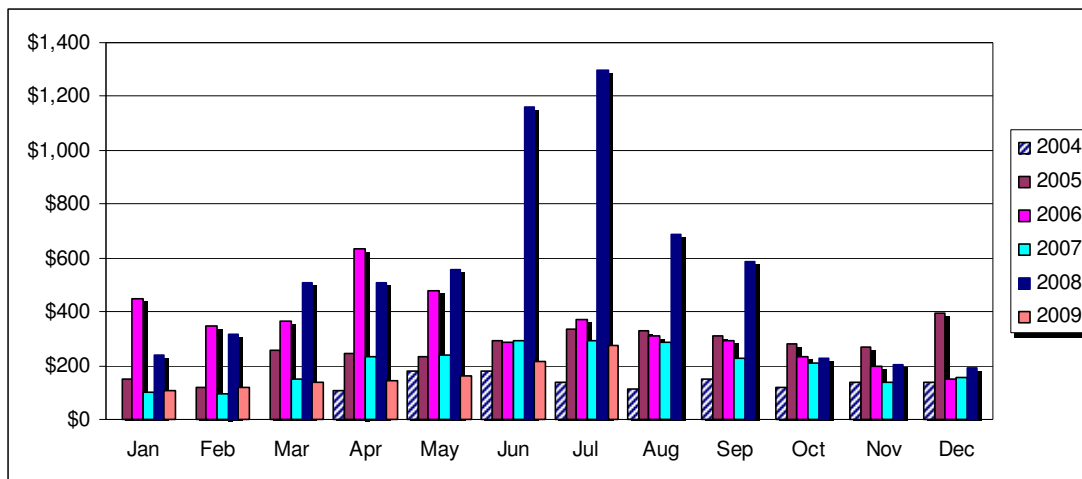
Received from Payers \$18,702,355,708

Amounts Paid

Paid to Payees \$18,152,111,167

Loss and Constraint Excess \$550,196,858

Graphically, total settlement since April 2004 is as follows:



3.2.2 Security Monitoring

At the end of July 2009 the clearing manager held security of \$218,430,911 with the total payers’ projected exposure to 27 July 2009 estimated at \$72,512,467.

There were 6 calls for security and no reductions in security in July.

3.2.3 Ancillary Services

Payments to Ancillary Services Agents in July 2009 for the June 2009 billing period totalled \$17,440,561. That amount was made up of the following:

Type	Amount (GST incl.)
Black Start	\$24,522
Over-frequency Reserve	\$59,945
Frequency Keeping	\$5,398,143
Instantaneous Reserve	\$11,240,474
Voltage Support	\$717,475

Further details and historical and graphical information regarding ancillary service can be found in the system operator monthly service provider report at:

<http://www.electricitycommission.govt.nz/opdev/servprovinfo/somonthly>

3.2.4 Constrained on

Total constrained on for the June 2009 billing period were \$3,839,742. These amounts were paid to generators by the clearing manager and the system operator on the June 2009 invoices issued in July 2009.

3.2.5 Constrained off

Total constrained off amounts for the June 2009 billing period were \$1,881,645. Only constrained off amounts that are attributable to the system operator are paid to generators.

3.2.6 Must Run Dispatch Auction

There were bids into the must run dispatch auction every day during the month.

3.3 Pricing Manager

3.3.1 Daily Pricing Statistics

For June 2009, the pricing manager performed 47 pricing solves. Seven solves were not published, 8 were published as Provisional, and 32 published as Final.

NB: There were 32 final solves due to 2 half-day solves for 21 July, Go-live for the new market system: trading periods 00:00 – 11:00 were solved and published with the old market system, and 11:30 – 23:30 with the new market system.

Pricing Situations that occurred in June were:

Infeasibility Situations	Metering Situations	High Spring Washer Price Situations
14	8	zero

3.3.2 Price Commentary

Average daily reference prices in July were relatively flat across the country with a baseline of at about \$50/MWh, exceeding \$100 /MWh on three days of high load.

Average South Island prices were up from June, with below-average hydro inflows. Average North Island prices fell about 10 %, with no major North Island generator outages.

Change in monthly average Final prices at reference nodes (\$/MWh):

	Jul-09	Jun-09	Change
BEN2201	55.02	32.53	69%
HAY2201	60.66	66.97	-9%
OTA2201	60.50	70.06	-14%

There were no major generation outages in July.

Lake storage levels at the end of July were 110% of the long-term average at this time of the year and 61% of maximum storage. At 2676 GWh they were 13% down from 3058 GWh at the end of June.

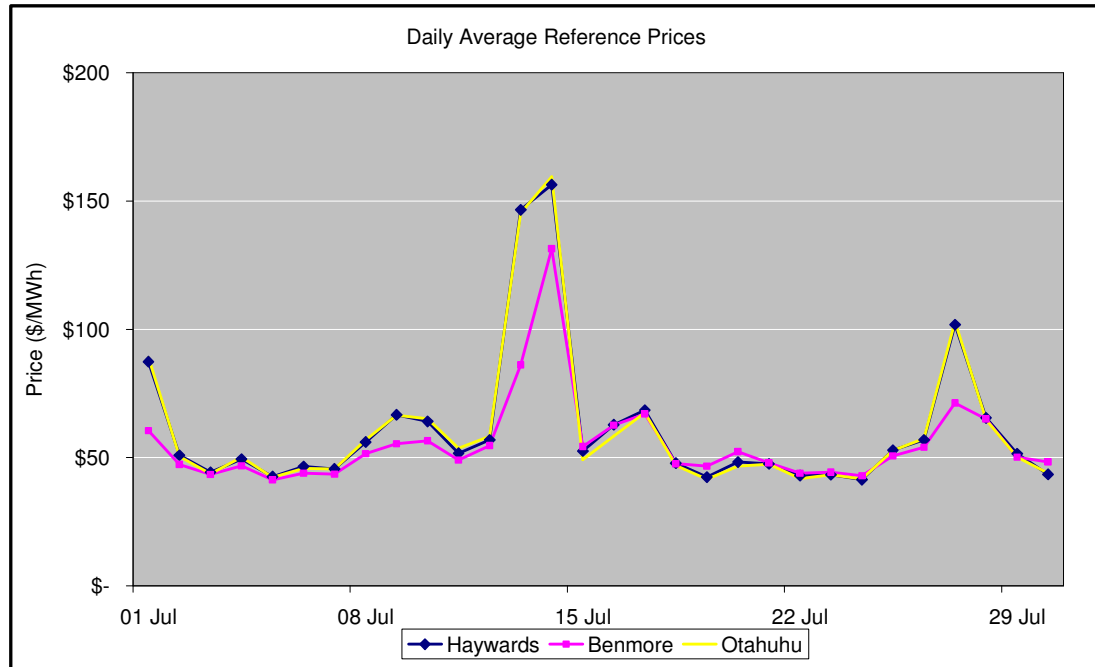
Total monthly inflows for June were 87% of the long term average, with two weeks of low inflows followed by 10 days of above-average inflows at the end of the month.

3.3.3 Monthly Average Reference Price Summary

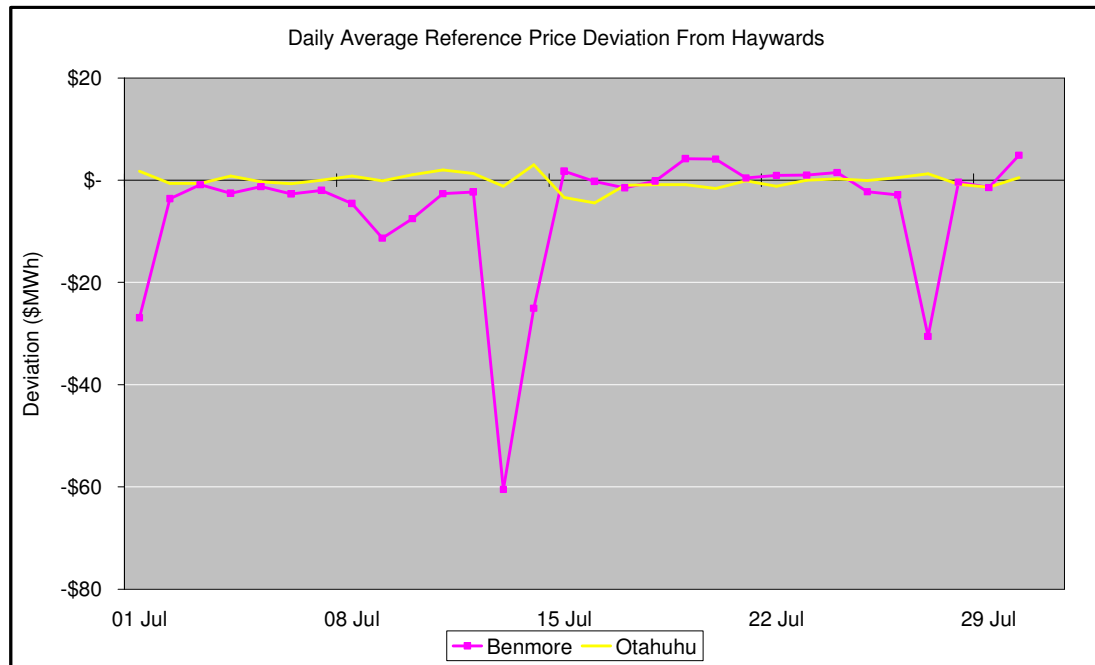
Haywards (HAY2201)	Forecast	Dispatch	Final
Average Price:	\$ 115.88	\$ 64.18	\$ 60.66
Highest Price:	\$ 1,560.45	\$ 1,111.69	\$ 1,111.17
Lowest Price:	\$ 30.90	\$ 0.04	\$ 0.52
Half Hours > \$100:	382	65	62
Average Weekday (excl stats):	\$ 116.48	\$ 69.13	\$ 64.38
Average Weekend (incl stats):	\$ 114.14	\$ 49.96	\$ 49.95
Benmore (BEN2201)	Forecast	Dispatch	Final
Average Price:	\$ 86.27	\$ 57.76	\$ 55.02
Highest Price:	\$ 850.02	\$ 265.40	\$ 251.91
Lowest Price:	\$ 32.96	\$ 8.18	\$ 5.36
Half Hours > \$100:	274	43	35
Average Weekday (excl stats):	\$ 86.70	\$ 60.45	\$ 57.20
Average Weekend (incl stats):	\$ 85.03	\$ 50.03	\$ 48.75
Otahuhu (OTA2201)		Dispatch	Final
Average Price:		\$ 64.26	\$ 60.50
Highest Price:		\$ 1,112.69	\$ 1,106.84
Lowest Price:		\$ 0.04	\$ 0.49
Half Hours > \$100:		69	62
Average Weekday (excl stats):		\$ 69.12	\$ 64.06
Average Weekend (incl stats):		\$ 50.27	\$ 50.28

Note: Forecast prices for Otahuhu are not published

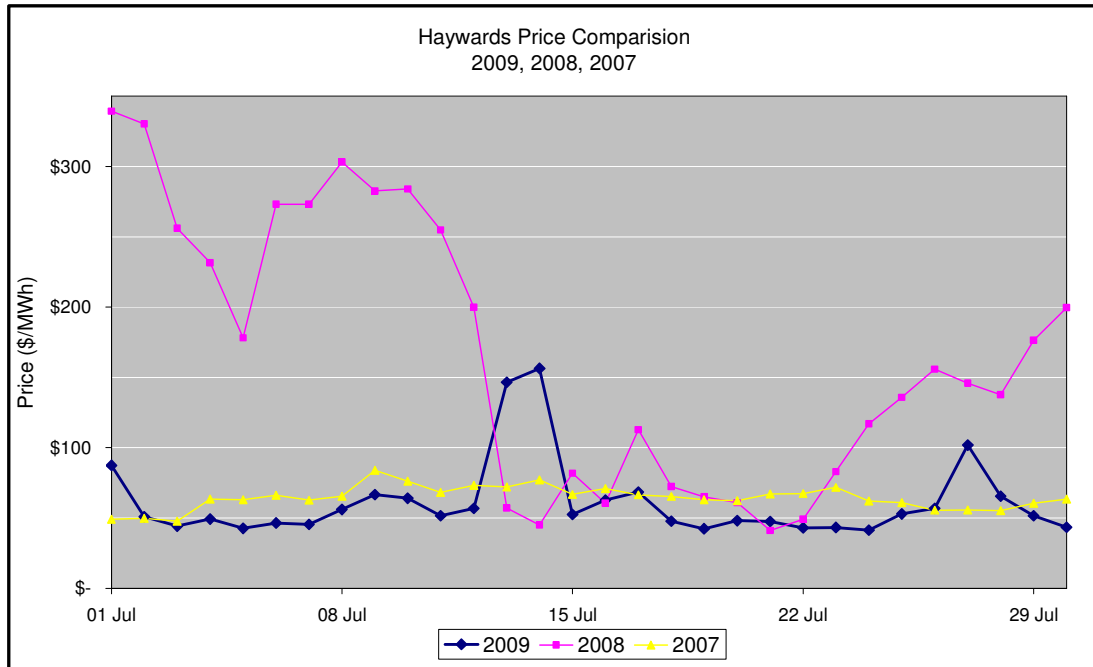
3.3.4 Daily Average Reference Price Graph



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

