# Market Operations

# Monthly Service Provider Report

## July 2008

This report details monthly information in relation to the wholesale information & trading system, clearing manager, pricing manager and reconciliation manager functions performed by M-co under contract to the Electricity Commission.

# Table of Contents

**Table of Contents** ..... **2**

**1. Introduction** ..... **4**

1.1 Purpose ..... 4

1.2 Contact Details ..... 4

**2. Core Reporting** ..... **5**

2.1 Compliance with Regulations and Rules ..... 5

2.2 Operation of the Regulations and Rules ..... 5

2.3 Compliance with Service Provider Agreements ..... 5

2.4 Rule Change Costs ..... 5

2.5 Compliance with Agreed Performance Standards ..... 6

2.5.1 Wholesale Information & Trading System Manager (COMIT) ..... 6

2.5.2 Clearing Manager ..... 6

2.5.3 Pricing Manager ..... 7

2.5.4 Reconciliation Manager ..... 7

**3. Additional Information** ..... **10**

3.1 Wholesale Information & Trading System (COMIT) ..... 10

3.1.1 WITS/COMIT Statistics ..... 10

3.1.2 Outage Summary ..... 10

3.1.3 Rule Change Implementations ..... 10

3.2 Clearing Manager ..... 11

3.2.1 Invoicing and Settlement ..... 11

3.2.2 Security Monitoring ..... 12

3.2.3 Ancillary Services ..... 12

3.2.4 Constrained on ..... 12

3.2.5 Constrained off ..... 12

3.2.6 Must Run Dispatch Auction ..... 12

3.2.7 System Development ..... 13

3.3 Pricing Manager ..... 14

3.3.1 Daily Pricing ..... 14

3.3.2 Price Commentary ..... 14

3.3.3 Monthly Average Reference Price Summary ..... 15

3.3.4 Daily Average Reference Price Graph ..... 15

3.3.5 Daily Average Reference Price Deviation from Haywards ..... 16

3.3.6 Daily Average Haywards Price Comparison ..... 16

3.3.7 Haywards 13 Month Daily Average Price Comparison ..... 17

3.4 Reconciliation Manager ..... 17

# 1. Introduction

## 1.1 Purpose

This report details monthly information in relation to the wholesale information & trading system, clearing manager, pricing manager and reconciliation manager functions performed by M-co 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

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

**Clearing & Settlement**
Shelley Nixon, Service Delivery Manager +64 4 498 0054

**Pricing**
Ashley Milkop, Senior Pricing Analyst +64 4 498 0028

**Reconciliation**
Zane Doran, Senior Reconciliation Analyst +64 4 498 0044

# 2. Core Reporting

## 2.1 Compliance with Regulations and Rules

To the best of our knowledge all M-co service providers complied with the respective obligations under the regulations and rules during July 2008.

## 2.2 Operation of the Regulations and Rules

The M-co service providers have not during July 2008 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 the M-co service providers have complied with their obligations under their respective service provider agreements during July 2008.

## 2.4 Rule Change Costs

In accordance with the requirements of the respective service provider agreements, no costs have been incurred since 1 July 2007 in relation to implementing rule changes.

## 2.5 Compliance with Agreed Performance Standards

### 2.5.1 Wholesale Information & Trading System Manager (COMIT)

| Measure | Achieved This Month | Standard |
|---|---|---|
| WITS/COMIT availability | **100%** | 99.72% |
| WITS/COMIT 6-month availability | 99.93% | 99.72% |
| WITS/COMIT file upload availability | **100%** | 99.72% |
| Average time to publish PDS | 5mins 15sec | 7mins |
| Average time to publish dispatch prices | 29secs | 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 EGRs as part of the Information System Service Provider Agreement.

### 2.5.2 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 | 1 | 0 |
| Number of security level calculation errors | 0 | 0 |

The washup for April 2007 that was contained on the June 2008 invoice was incorrect due to the inadvertent deletion of random reconciled data records from the data tables in CHASM. Further details relating to this error will be provided to the Commission separately.

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.

### 2.5.3 Pricing Manager

| 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 | 97% | 97% |
| Final prices published within 2 hours 30 minutes of a System Operator/Grid Owner fix to a provisional price situation | 97% | 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.

### 2.5.4 Reconciliation Manager

#### 2.5.4.1 System Performance

| Parameter to be measure | Performance requirement | Performance achieved | Requirement met | Rule ref |
|---|---|---|---|---|
| System availability to participants | 99.5% min | 100% | Yes | |
| Preferred availability | 99.8% min | 100% | Yes | |
| Number of corrective maintenance jobs carried out | Number | 0 | Yes | |
| All confirmations of files being received and validated reported back to participants within 10 minutes of file receipt | 100% | 100% | Yes | |
| All confirmations of files with errors reported back to participants within 10 minutes of file receipt | 100% | 100% | Yes | |
| Disaster recovery and backup obligations | 100% | 100% | Yes | |

The system must be available to receive and provide information 24x7, with the exception of planned outages. The target level of 99.5% relates to the equivalent of the system being unavailable for 3.5 hours within a calendar month. The

target level of 99.8% per calendar month is preferred, which is the equivalent of the system being unavailable for 1.5 hours.

#### 2.5.4.2 Operational and Rules Performance

| Parameter to be measure | Performance requirement | Performance achieved | Requirement met | Rule ref |
|---|---|---|---|---|
| Reconciliation manager notified registry of changes to balancing areas | Within 1 business day | Within 1 business day | Yes | Part E schedule E1 rule 7.2 |
| Number of new NSP's allocated and advised to registry | Report | Reported | Yes | Part E schedule E1 rule 7.2 |
| New and decommissioned NSP's allocated, and changes to existing NSP's notified to registry | Within 1 business day | Within 1 business day | No | Part E schedule E1 rule 8.2 |
| Reconciliation manager reports to reconciliation participants, participants and the Board for revision submissions | 12:00 hours on the last business day of the month | By 08:44 hours on 30 June 2008 | Yes | Part J4 rule 14 |
| Provision of reconciliation information for revision submissions | 12:00 hours on the last business day of the month | 14:26 hrs on the 30th July 2008 | Yes | Part J4 rule 15 |
| Publish half hour profile shape day for profiles for revision submissions | 12:00 hours on the last business day of the month | 14:26 hrs on the 30th July 2008 | Yes | Part J4 rule 15.5 |
| Number and details of service provider rule or agreement breaches and details for the previous months day 13 revision submissions | 13:00 hrs on the 2nd business day of the month | N/A | N/A | Part J rule 13.1 |
| Number and details of participant rule breaches and details for the previous months day 13 revision submissions | 13:00 hrs on the 2nd business day of the month | N/A | N/A | Part J rule 13.1 |

| | | | | |
|---|---|---|---|---|
| Clearing manager and reconciliation participant reports for the day 13 revision submissions | 13:00 hrs on the last business day of each reconciliation period | 14:26 hrs on the 30th July 2008 | Yes | Part J4 rule 15 |

| Parameter to be measure | Performance requirement | Performance achieved | Requirement met | Rule ref |
|---|---|---|---|---|
| Publication of forward and historic estimates proportion for each balancing area for each participant. | 13:00 hrs on the 7th business day of the month | N/A | N/A | Part J3 rule 4 |
| Number and details of service provider rule or agreement breaches and details for the day 4 interim data submission | 13:00 hrs on the 9th business day of the month | 13:00 hrs on the 11th July 2008 | Yes | Part J rule 13.1 |
| Number and details of participant rule breaches and details for the day 4 data submission | 13:00 hrs on the 9th business day of the month | 13:00 hrs on the 11th July 2008 | Yes | Part J rule 13.1 |
| Reconciliation manager reports to reconciliation participants, participants and the Board for interim submissions | 16:00 hrs on the 7th business day of the month | 13:28 hrs on the 9th July 2008 | Yes | Part J4 rule 14 |
| Provision of reconciliation information for interim submissions | 16:00 hrs on the 7th business day of the month | 13:28 hrs on the 9th July 2008 | Yes | Part J4 rule 15 |
| Publish half hour profile shape day for profiles for interim submissions | 16:00 hrs on the 7th business day of the month | 13:28 hrs on the 9th July 2008 | Yes | Part J4 rule 15.5 |
| Clearing manager and reconciliation participant reports | 16:00 hrs on the 7th business day of the month | 13:28 hrs on the 9th July 2008 | Yes | Part J4 rule 15 |

The target levels for operational and rule performance is based on the reconciliation manager fulfilling its obligation under Part E and Part J of the rules.

# 3. Additional Information

## 3.1 Wholesale Information & Trading System (COMIT)

### 3.1.1 WITS/COMIT Statistics

The following are key statistics for COMIT for the month of July 2008:

| Measure | Result | Target | Comments |
|---|---|---|---|
| Core Planned | 0 | - | No outages. |
| Core Unplanned | 0 | - | No outages. |

Core functionality denotes all the systems and facilities necessary to fulfil the information system requirements of the EGRs as part of the Wholesale Information and Trading System Service Provider Agreement.

### 3.1.2 Outage Summary

There were no planned or unplanned outages to the WITS/COMIT system during the month.

### 3.1.3 Rule Change Implementations

No rule change implementations were carried out during the month.

## 3.2 Clearing Manager

### 3.2.1 Invoicing and Settlement

Monthly settlement (June 2008 billing period settled on July 21):

**Amounts Received**

| | |
|---|---|
| Received from Payers | $1,296,376,717 |

**Amounts Paid**

| | |
|---|---|
| Paid to Payees | $1,246,705,172 |
| Loss and Constraint Excess | $49,671,544 |

Total settlement (1 April 04 to 31 July 08):

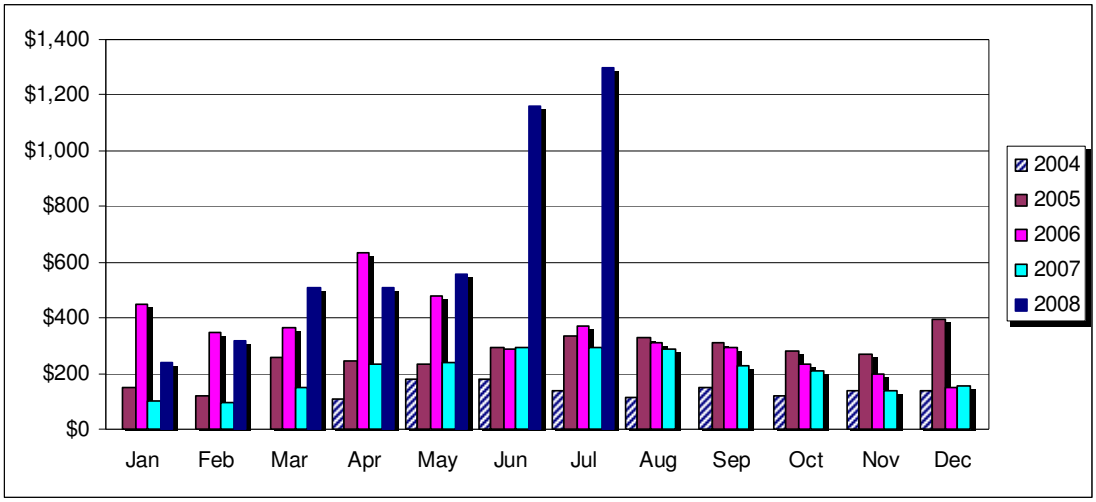
**Amounts Received**

| | |
|---|---|
| Received from Payers | $15,629,260,041 |

**Amounts Paid**

| | |
|---|---|
| Paid to Payees | $15,237,307,104 |
| Loss and Constraint Excess | $391,945,285 |

Graphically, total settlement since April 2004 is as follows:



### 3.2.2 Security Monitoring

At the end of July 2008 the clearing manager held security of $332,061,566 with the total payers' projected exposure to 27th August 2008 estimated at $165,949,523.60.

There were 3 calls for security and no reductions in security in July.

### 3.2.3 Ancillary Services

Payments to Ancillary Services Agents in July 2008 for the June 2008 billing period totalled $25,879,941. That amount was made up of the following:

| Type | Amount (GST incl.) |
|---|---|
| Black Start | $37,305 |
| Over-frequency Reserve | $58,842 |
| Frequency Keeping | $9,020,320 |
| Instantaneous Reserve | $15,914,248 |
| Voltage Support | $849,226 |

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 2008 billing period were $1,257,328. These amounts were paid to generators by the clearing manager and the system operator on the June 2008 invoices issued in July 2008.

### 3.2.5 Constrained off

Total constrained off amounts for the June 2008 billing period were $3,508,787. Only constrained on/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 of July 2008.

### 3.2.7 System Development

A change was implemented to CHASM software in July to accommodate new participant user codes following the introducing of new reconciliation rules in May 2008.

## 3.3 Pricing Manager

### 3.3.1 Daily Pricing

For July's pricing there were 41 pricing solves. 5 solves were published as Provisional, 31 published as Final, and 6 not published. The breakdown was as follows:

| Pricing solves | Infeasible | Metering situations | High spring washer price situations |
|---|---|---|---|
| 41 | 8 | 0 | 0 |

### 3.3.2 Price Commentary

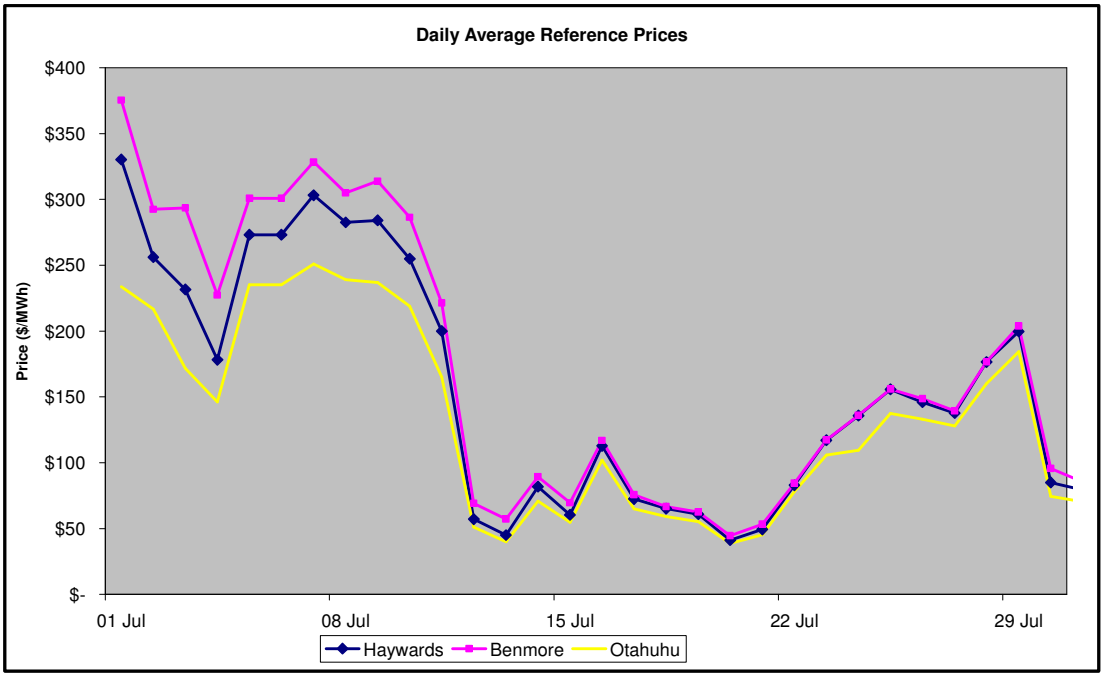
Average prices in July were lower compared to June. The average price at HAY2201 during July 2008 was $155.76/MWh compared to $305.95/MWh in June.

Lake storage levels increased in July, going from 1517GWh at the beginning of the month to 1670GWh on 31 July, which is 70 percent of average for that time of year.

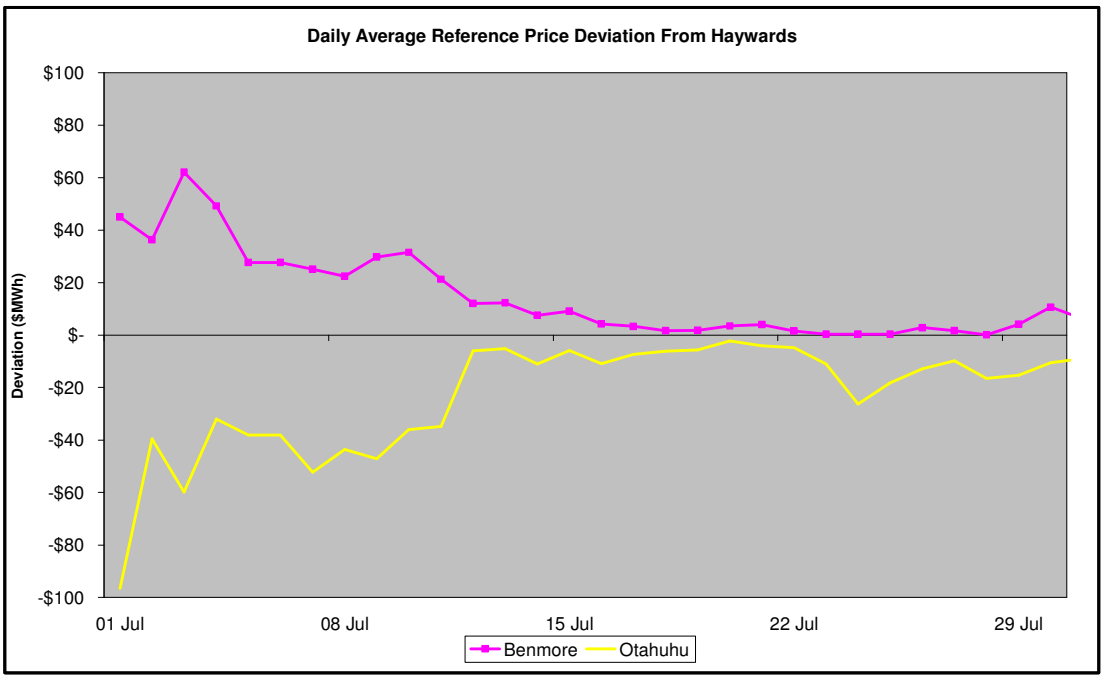
### 3.3.3 Monthly Average Reference Price Summary

| **Haywards (HAY2201)** | | **Forecast** | | **Dispatch** | | **Final** |
|---|---|---|---|---|---|---|
| Average Price: | $ | 177.63 | $ | 152.12 | $ | 154.56 |
| Highest Price: | $ | 475.68 | $ | 472.15 | $ | 473.67 |
| Lowest Price: | $ | 35.33 | $ | 0.03 | $ | 0.02 |
| Half Hours > $100: | | 1,104 | | 815 | | 807 |
| Average Weekday (excl stats): | $ | 186.73 | $ | 162.31 | $ | 164.90 |
| Average Weekend (incl stats): | $ | 151.21 | $ | 122.40 | $ | 124.42 |
| | | | | | | |
| **Benmore (BEN2201)** | | **Forecast** | | **Dispatch** | | **Final** |
| Average Price: | $ | 195.90 | $ | 167.64 | $ | 169.83 |
| Highest Price: | $ | 501.51 | $ | 497.78 | $ | 499.37 |
| Lowest Price: | $ | 41.35 | $ | 6.25 | $ | 6.25 |
| Half Hours > $100: | | 1,164 | | 867 | | 846 |
| Average Weekday (excl stats): | $ | 205.56 | $ | 178.82 | $ | 181.29 |
| Average Weekend (incl stats): | $ | 167.80 | $ | 134.99 | $ | 136.40 |
| | | | | | | |
| **Otahuhu (OTA2201)** | | | | **Dispatch** | | **Final** |
| Average Price: | | | $ | 131.87 | $ | 131.79 |
| Highest Price: | | | $ | 302.73 | $ | 310.09 |
| Lowest Price: | | | $ | 0.03 | $ | 0.02 |
| Half Hours > $100: | | | | 738 | | 740 |
| Average Weekday (excl stats): | | | $ | 139.61 | $ | 138.88 |
| Average Weekend (incl stats): | | | $ | 109.26 | $ | 111.05 |

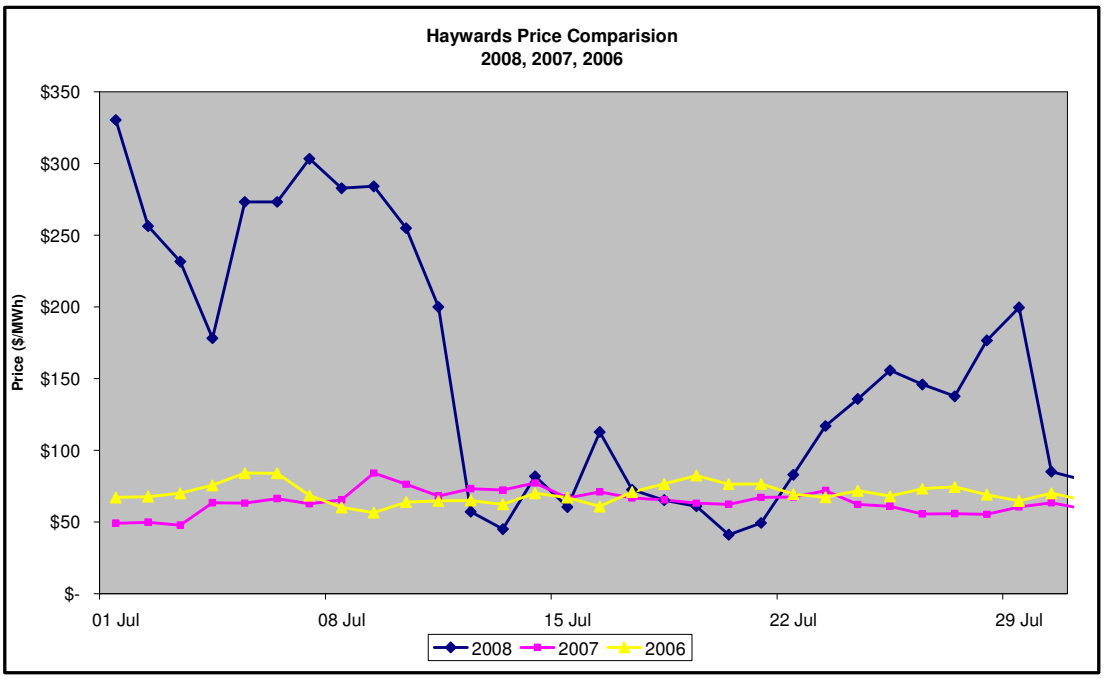
### 3.3.4 Daily Average Reference Price Graph



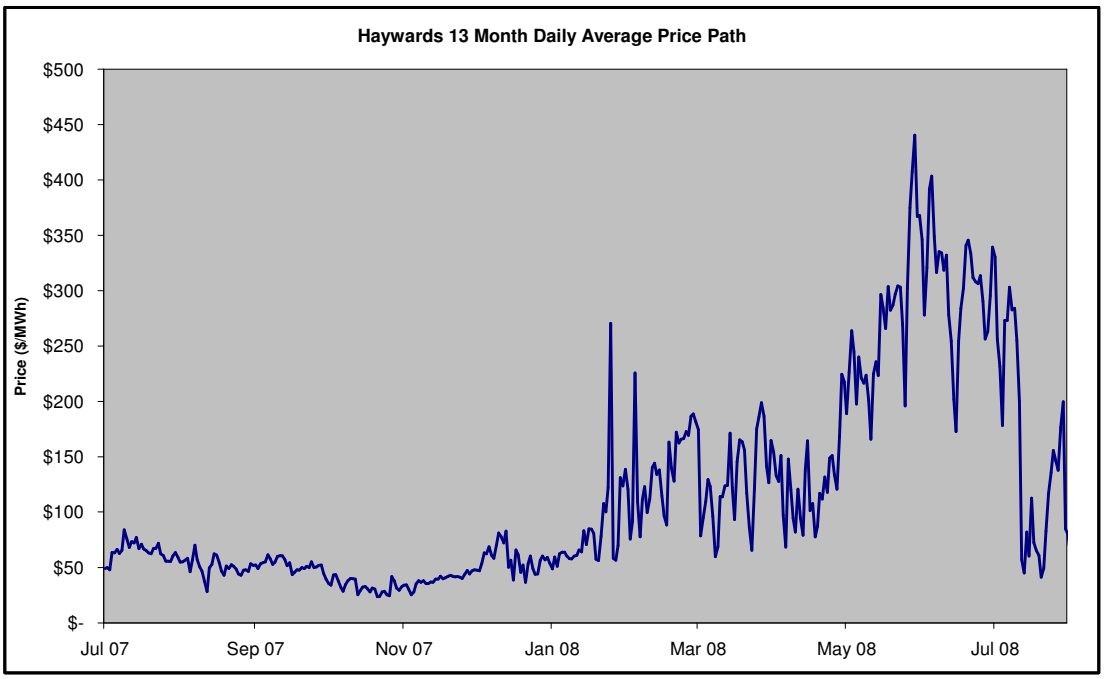
## 3.3.5 Daily Average Reference Price Deviation from Haywards




## 3.3.6 Daily Average Haywards Price Comparison



### 3.3.7 Haywards 13 Month Daily Average Price Comparison

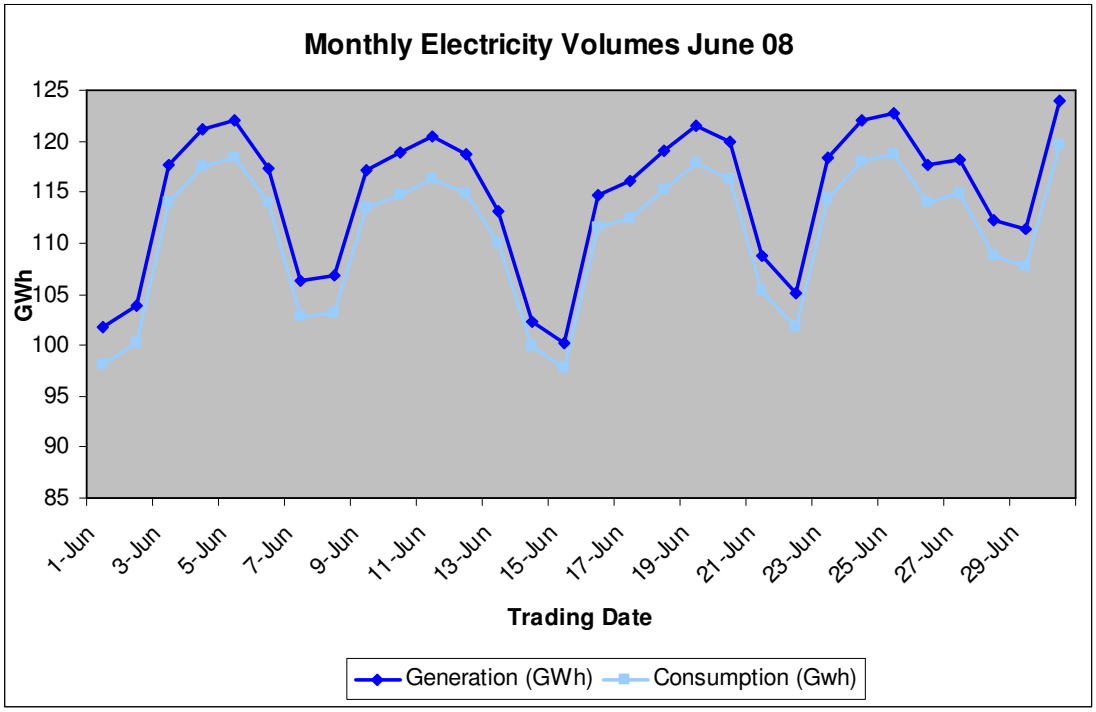


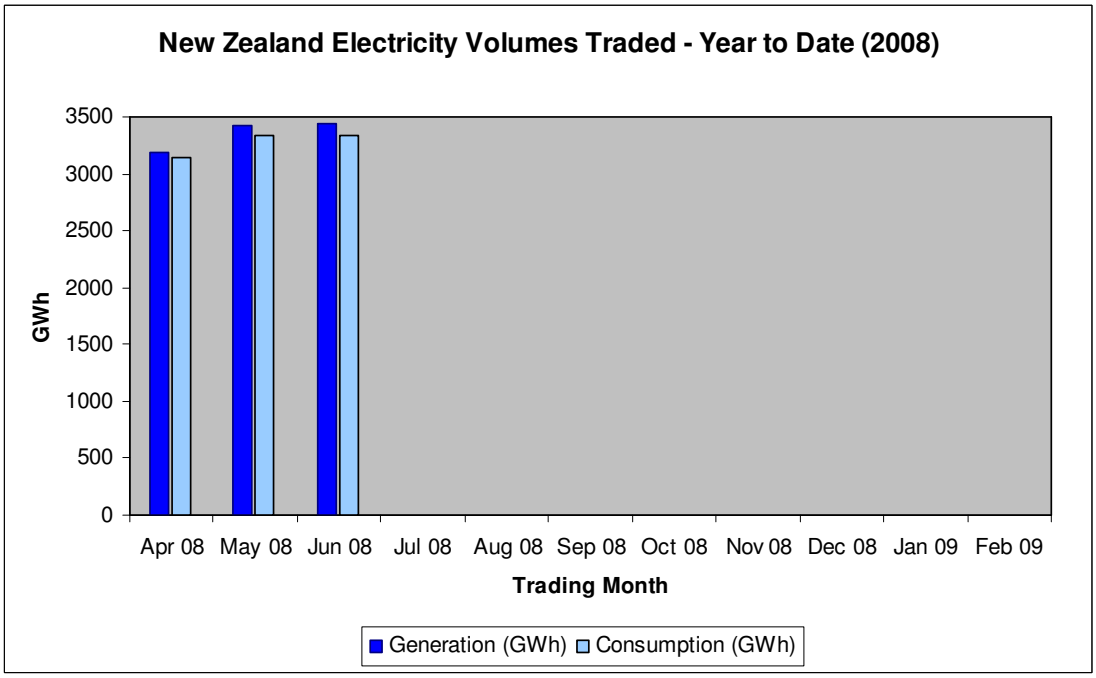

## 3.4 Reconciliation Manager

In July, the reconciliation manager successfully completed a reconciliation run for the June 08 consumption period, and provided revision information for Jun 08, Apr 08, Dec 07 and May 07 to participants.

The graph below highlights the total daily generation and demand for electricity in which the reconciliation manager reconciled for the consumption period of June 2008[1].

[1] Based on NSP volume data for the consumption period June 2008




The above graph illustrates the year to date total of the volume of electricity generation and consumption traded, for all NSPs across New Zealand.[2]

[2]Data is available for April, May and June 2008