



# Market Operations

## Monthly Service Provider Report

This report details monthly information in relation to the Wholesale Information & Trading System (WITS), clearing manager, pricing manager and reconciliation manager functions performed by NZX under contract to the Electricity Authority (Authority).

May 2023

Created: 01 June 2023



# CONTENTS

1.	Introduction	3
2.	Compliance	4
3.	Service Level Reporting	5
4.	Systems Update	7
5.	Incidents	9
6.	Stakeholders	11
7.	Clearing and Settlement Market Summary	12
8.	Reconciliation Market Summary	14



# 1. Introduction

## 1.1 Purpose

This report details monthly information in relation to the Wholesale Information & Trading System (WITS), clearing manager, pricing manager and reconciliation manager and performed by NZX under contract to the Electricity Authority (Authority).

This report contains core reporting requirements in compliance with Clauses 3.13 and 3.14 of the Electricity Participation Code 2010 and relevant Market Operator Service Provider (MOSP) agreements.

## 1.2 Contact Details

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

### Service Operations

**Tim Chadwick**

Head of Energy Operations

**+64 4 495 2816**



## 2. Compliance

### 2.1 Compliance with Regulations and Code

For this month, to the best of our knowledge, the Clearing Manager, Reconciliation Manager and WITS Service Provider fully complied with the Code and regulations.

### 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 MOSP Agreements

To the best of our knowledge, all provisions of the Clearing Manager, WITS Manager and Reconciliation Manager MOSP agreements have been adhered to during the reporting month.

### 2.4 Reasons for non-compliance

Breach	Circumstances
N/A	



### 3. Service Level Reporting

#### 3.1 WITS service levels against target

Measure	Target	Achieved this month
WITS availability	>99.72%	99.85%
WITS file upload availability	>99.72%	99.99%
Average time to publish NRSS & PRSS	<1 minute	24 sec
Average time to publish NRSL & PRSL	<7 minutes	130sec

#### 3.2 Clearing manager service levels

##### 3.2.1 Clearing manager service levels against targets

Measure	Target	Achieved this month
No. of wash-up notifications published later than the 5th business day of the month	Zero	0 late publications
No. of hedge settlement agreement amounts published later than the 5th business day of the month	Zero	0 late publications
No. of constrained amounts sent to system operator later than 09:00 hrs on 8th business day of the month	Zero	0 late notification
Availability achieved during the month	> 99.5%	100%

##### 3.2.2 Clearing manager service level reporting

Measure	Metric	Achieved this month
Number of publication targets missed	No	0
Number of invoice revisions during the month	No	0
Date of issue of last invoice during the month	Date	11/05/2023
Number of unplanned outages during the month	No	0
Number of planned outages during the month	No	0
Availability achieved during the month	% attained	100%
Number of prudential defaults during the month	No	0
Scaling applied to generator payments	% attained	0%
Number of data files provided to the Authority	No	21 constrained amount files; 22 daily prudential summaries.

#### 3.3 Reconciliation manager service performance

##### 3.3.1 Reconciliation manager service levels against targets

Measure	Target	Achieved this month
Availability between business days 1 and 4, and 9 and 13	99.8%	100%
Availability for other times of the month	99.5%	99.99%

\* See section 2.3

### 3.3.2 Reconciliation manager service level reporting

Measure	Metric	Achieved this month
Number of days late for publication of reconciliation information	0 Days	0 day
System availability between business days 4, 7, 9 and 13 for the month	% attained	99.99%
System availability outside business days 4, 7, 9 and 13 for the month	% attained	99.99%
Number of volumes disputes resolved in the month	No.	0
Number of requests to re-run reconciliation as a result of an invoice dispute	No.	0 request
Setup of approved profiles within 1 business day of receiving a notification from the Authority	% attained	100%
Total outages:		
- Planned	No.	0 hours
- Unplanned	No.	0 hours



## 4. Systems Update

### 4.1 Functional specification status

System	Latest revision	Approved by the Authority**
WITS	12.0	●
Clearing manager	30.0	●
Reconciliation manager	15.0	●

\*\*For this table, and for the remaining tables in this report, ● indicates yes and ● indicates no.

### 4.2 Backup requirements

System	Daily data backup requirement met <sup>1</sup>	Weekly data backup requirement met <sup>2</sup>	Reason for requirement not being met
WITS	●	●	N/A
Clearing manager	●	●	N/A
Reconciliation manager	●	●	N/A

---

<sup>1</sup> Backup copies of all data and processed data must be taken at least daily and stored in a secure offsite location. Likewise, copies of the latest version of the software must also be kept offsite.

---

<sup>2</sup> At least weekly, a backup copy of the data, processed data and software must be delivered and stored at an offsite location at least 100km from the premises used to provide the regular services.

### 4.3 Disaster recovery and BCP testing

Date	Service	Application/Scope	Status
17 Apr – 22 May 2018	Reconciliation Manager	Disaster Recovery	Complete
17 Apr – 22 May 2018	Clearing Manager	Disaster Recovery	Complete
17 Apr – 22 May 2018	Pricing Manager	Disaster Recovery	Complete
17 Apr – 22 May 2018	WITS	Disaster Recovery	Complete
13 Nov – 27 Nov 2018	Reconciliation manager	Disaster Recovery	Complete
13 Nov – 27 Nov 2018	Clearing manager	Disaster Recovery	Complete
13 Nov – 27 Nov 2018	Pricing Manager	Disaster Recovery	Complete
13 Nov – 27 Nov 2018	WITS	Disaster Recovery	Complete
16 Apr – 30 Apr 2019	Reconciliation manager	Disaster Recovery	Complete
16 Apr – 30 Apr 2019	Clearing manager	Disaster Recovery	Complete
16 Apr – 30 Apr 2019	Pricing Manager	Disaster Recovery	Complete
16 Apr – 30 Apr 2019	WITS	Disaster Recovery	Complete
4 Nov – 15 Nov 2019	Reconciliation manager	MOSP combined DR	Complete
4 Nov – 15 Nov 2019	Clearing manager	MOSP combined DR	Complete
4 Nov – 15 Nov 2019	Pricing Manager	MOSP combined DR	Complete
4 Nov – 15 Nov 2019	WITS	MOSP combined DR	Complete
1 <sup>st</sup> Half 2020	ALL	Disaster Recovery	Waived
16 Jul – 18 Aug 2020	ALL	Disaster Recovery	Complete
16 Jul – 28 Oct 2020	ALL	Disaster Recovery	Complete
16 Mar – 29 Apr 2021	Clearing Manager	Disaster Recovery	Complete
16 Mar – 29 Apr 2021	Pricing Manager	Disaster Recovery	Complete
16 Mar – 29 Apr 2021	WITS	Disaster Recovery	Complete
16 Mar – 4 May 2021	Reconciliation Manager	Disaster Recovery	Complete
16 Oct – 16 Nov 2021	Clearing Manager	Disaster Recovery	Complete
16 Oct – 16 Nov 2021	Pricing Manager	Disaster Recovery	Complete
16 Oct – 16 Nov 2021	WITS	Disaster Recovery	Complete
16 Oct – 16 Nov 2021	Reconciliation Manager	Disaster Recovery	Complete
17 May – 31 May 2022	Clearing Manager	Disaster Recovery	Complete
17 May – 31 May 2022	Pricing Manager	Disaster Recovery	Complete
17 May – 31 May 2022	WITS	Disaster Recovery	Complete
17 May – 31 May 2022	Reconciliation Manager	Disaster Recovery	Complete
7 Nov – 14 Nov 2022	Clearing Manager	Disaster Recovery	Complete
7 Nov – 14 Nov 2022	WITS	Disaster Recovery	Complete
7 Nov – 14 Nov 2022	Reconciliation Manager	Disaster Recovery	Complete
23 May – 29 May 2023	Clearing Manager	Disaster Recovery	Complete
23 May – 29 May 2023	WITS	Disaster Recovery	Complete
23 May – 29 May 2023	Reconciliation Manager	Disaster Recovery	Complete

### 4.4 Developer access to production systems

*This is a separately reported metric*



## 5. Incidents

### 5.1 WITS incident - fault response and resolution times

Priority	Measure	Standard	Achieved this month	Incident Ref #
1	Respond within 15 minutes of receipt of a support request	100%	100%	0
	Work around or resolve within 6 hours	100%	100%	0
	Work around resolved within 20 business days	100%	100%	0
2	Respond within 2 hours of receipt of a support request	100%	100%	0
	Work around or emergency fix within 1 business day	100%	100%	0
	Resolve within 20 business days	100%	100%	0
3	Respond within 1 business day	100%	100%	90314 90121 89820
	Resolve within 40 business days	100%	100%	90314 90121 89820
4	Acknowledgment of downgrade of severity to level 4 within 1 business day of downgrade	100%	100%	90009
	Resolve at the next convenient opportunity as agreed with the Authority	100%	100%	90009

### 5.2 Clearing manager incident – fault response and resolution times

Priority	Measure	Standard	Achieved this month	Incident Ref #
1	Respond within 15 minutes of receipt of a support request, received between 07:30 hrs to 19:30 hrs on a business day	100%	100%	0
	Work around or resolve within 6 hours	100%	100%	0
	Work around resolved within 20 business days	100%	100%	0
2	Respond within 2 hours of receipt of a support request, received between 07:30 hrs to 19:30 hrs on a business day	100%	100%	0
	Work around or emergency fix within 1 business day	100%	100%	0
	Resolve within 20 business days	100%	100%	0
3	Respond within 1 business day	100%	100%	90390 90179
	Resolve within 40 business days	100%	100%	90390 90179
4	Acknowledgment of downgrade of severity to level 4 within 1 business day of downgrade	100%	100%	0
	Resolve at the next convenient opportunity as agreed with the Authority	100%	100%	0

### 5.3 Reconciliation manager incident – Fault response and resolution times

Priority	Measure	Standard	Achieved this month	Incident Ref #
1	Respond within 15 minutes of receipt of a support request, received between 07:30 hrs to 19:30 hrs on a business day	100%	100%	0
	Work around or resolve within 6 hours	100%	100%	0
	Work around resolved within 20 business days	100%	100%	0

2	Respond within 2 hours of receipt of a support request, received between 07:30 hrs to 19.30 hrs on a business day	100%	100%	0
	Work around or emergency fix within 1 business day	100%	100%	0
	Resolve within 20 business days	100%	100%	0
3	Respond within 1 business day	100%	100%	0
	Resolve within 40 business days	100%	100%	0
4	Acknowledgment of downgrade of severity to level 4 within 1 business day of downgrade	100%	100%	0
	Resolve at the next convenient opportunity as agreed with the Authority	100%	100%	0



## 6. Stakeholders

### 6.1 User group meetings

Role	Date	Status
Reconciliation manger and clearing manager	10 August 2016 (Wellington)	Complete
WITS and pricing manager	12 October 2016 (Wellington)	Complete
All roles	23 May 2017 (Auckland)	Complete
All roles	23 November 2017 (Wellington)	Complete
WITS	27 June 2018 (Auckland)	Complete
Combined	8 November 2018 (Wellington)	Complete
Clearing	November 2019 (Wellington)	Complete
WITS	December 8 2020 (Remote)	Complete

### 6.2 Stakeholder meetings

Date	Participant	Status
2/05/2023	Orion	Complete
2/05/2023	NewPower	Complete
29/05/2023	Sunshine Solar	Complete

## 7. Clearing and Settlement Market Summary

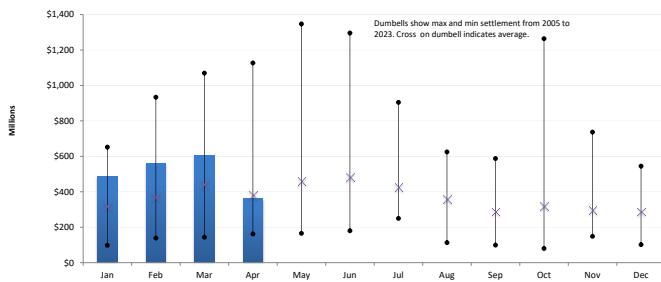
### Settlement Data

Amount	
Settlement month	April 2023
Settlement date	22 May 2023
Amounts owed from payers	\$361,999,669.40
Amounts owed to payees	\$346,449,872.51
Loss and constraint excess	\$12,513,443.75
Payer volumes	3,183,993.470 MWh
Payee volumes	3,293,839.055 MWh

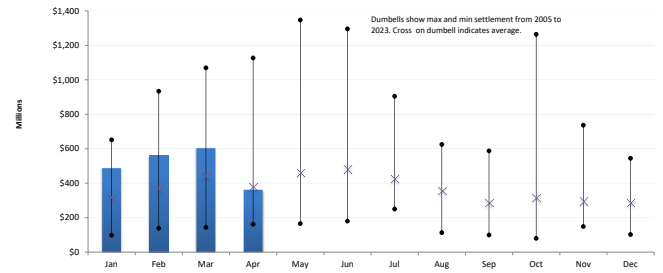
### Prudential Data

Amount	
As at date	31 May 2023
Total security held	\$424,315,579.76
Total assessed exposure	\$159,180,179.17.
No. of security increases	24
No. of security reductions	3
Settlements made from prudential	3

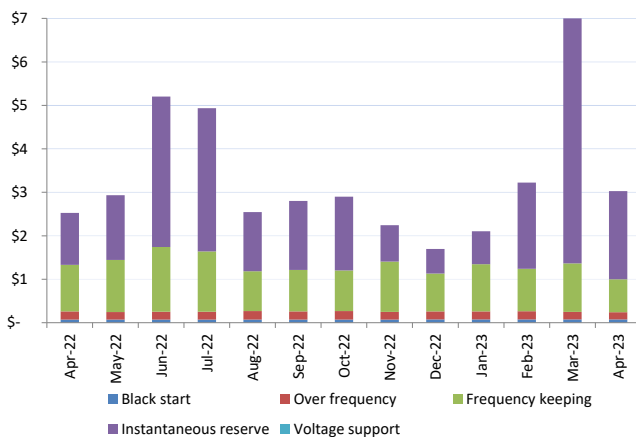
### 2023 Payer Amounts Owed Relative to Previous Years



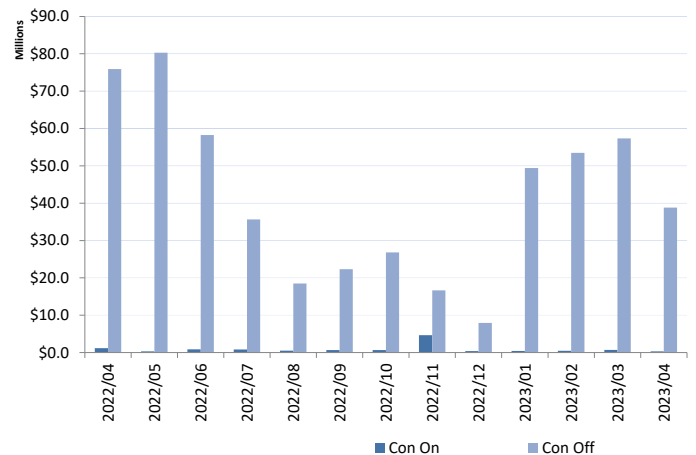
### 2022 – 2023 Amounts Payable since Net Settlement Introduced



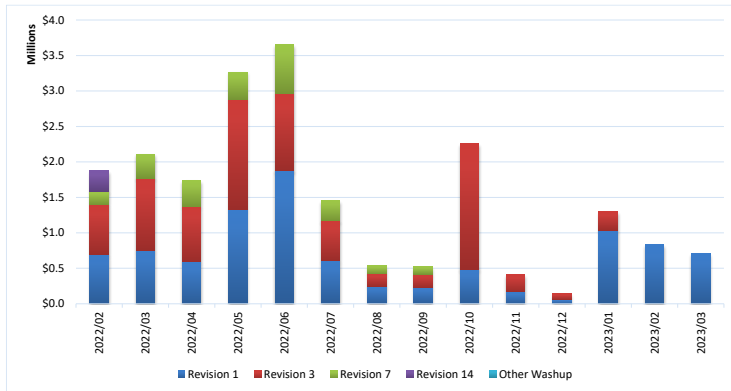
### 13 Month Rolling Total Ancillary Service Amounts



### 13 Month Rolling Total Constrained Amounts



### 14 Month Rolling Washups\*



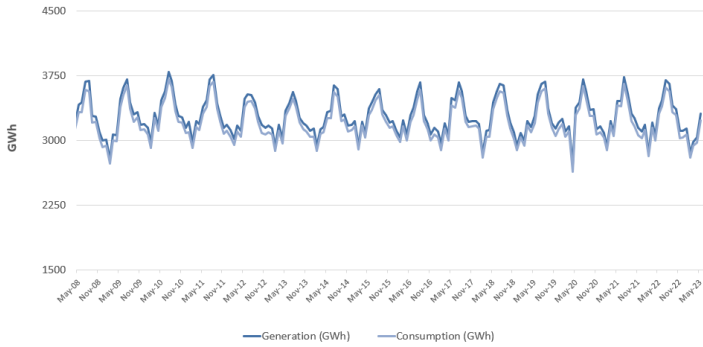
### Washup Totals

February 2023 Washups	Value \$
Revision 1	\$9,636,999.34
Revision 3	\$8,417,172.35
Revision 7	\$2,484,248.81
Revision 14	\$284,878.40
Other Washup	-
<b>Total</b>	<b>\$20,823,298.90</b>

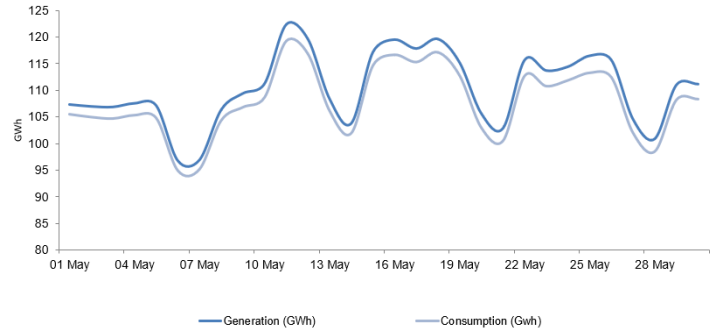
These charts show total wash-ups due to the clearing manager by billing period and by wash-up revision month

## 8. Reconciliation Market Summary

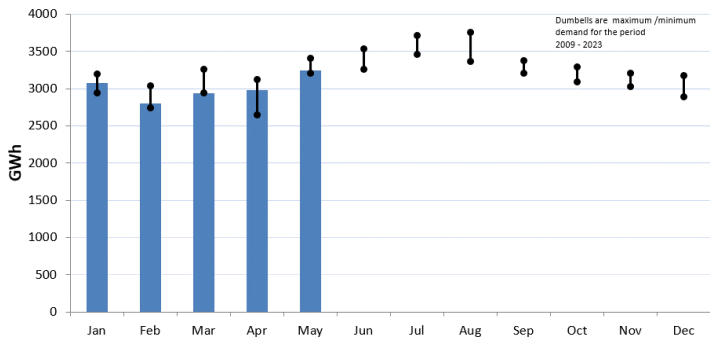
**Monthly Electricity Volumes**



**New Zealand Electricity Volumes Traded – Continuous Series**



**2023 New Zealand Monthly Demand Relative to Previous Years**



**2023 New Zealand Monthly Generation Relative to Previous Years**

