

# **IDPOWERELECTRICITY INDUSTRY PARTICIPATION CODE RECONCILIATION PARTICIPANT AUDIT REPORT**

For

ID Power

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## EXECUTIVE SUMMARY

This audit has been prepared over an extended period and for many functions has been conducted up to 3 times. This process has allowed ID Power to improve some processes, but in particular to develop strong audit trail reporting that now fully supports detailed auditing as required by the Authority.

Some minor issues have arisen during the audit, in all cases these have been corrected and we have revisited the corrected processes in order to establish that the changes were effective.

Where this has occurred an allegation of non compliance is raised but is given "cleared" status.

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Changed ICP information	3.3	10 of sched 11.1	Failed to provide registry information within 5 business days	Strong	low	1	Implemented - cleared.
Profile information	3.5	9 of sched 11.1	Provision of incorrect profile information	Strong	Low	1	Implemented - cleared
Delivery of submission information	12.2	15.4	Late delivery of submission information	Strong	Low	1	Implemented - cleared
Future Risk Rating						3	

### RECOMMENDATIONS

Subject	Section	Description	Recommendation

### ISSUES

Subject	Section	Description	Issue

## 1. ADMINISTRATIVE

### 1.1. Exemptions from Obligations to Comply with Code (Section 11)

#### Code reference

*Section 11 of Electricity Industry Act 2010.*

#### Code related audit information

*Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.*

#### Audit observation

ID Power do not hold any exemption from compliance with the Code.

#### Audit commentary

N/A

### 1.2. Structure of Organisation

ID Power is a small startup retailer using custom built software and having 1 staff member.

### 1.3. Persons involved in this audit

Michael Causley	IDPower	
Paul Troon	Auditor	

### 1.4. Use of Agents (Clause 15.34)

#### Code reference

*Clause 15.34*

#### Code related audit information

*A reconciliation participant who uses an agent*

- remains responsible for the contractor's fulfilment of the participant's Code obligations*
- cannot assert that it is not responsible or liable for the obligation due to something the agent has or has not done*

#### Audit observation

ID Power use Wells to gather NHH meter readings.

#### Audit commentary

N/A

### 1.5. Hardware and Software

ID Power use custom software and SQL databases.

### 1.6. Breaches or Breach Allegations



Two breach allegations are identified - both from the Reconciliation Manager for late delivery of submission information. This is further discussed in section 12.2 of this audit report.

#### 1.7. ICP Data

Metering Category	19/3/2018	25/6/2018	
1	80	244	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
9	0	0	

Status	Number of ICPs 19/3/2018	Number of ICPs 25/6/2018	
Active (2,0)	80	243	
Inactive – new connection in progress (1,12)	0	0	
Inactive – electrically disconnected vacant property (1,4)	0	1	
Inactive – electrically disconnected remotely by AMI meter (1,7)	0	0	
Inactive – electrically disconnected at pole fuse (1,8)	0	0	
Inactive – electrically disconnected due to meter disconnected (1,9)	0	0	
Inactive – electrically disconnected at meter box fuse (1,10)	0	0	
Inactive – electrically disconnected at meter box switch (1,11)	0	0	
Inactive – electrically disconnected ready for decommissioning (1,6)	0	0	
Inactive – reconciled elsewhere (1,5)	0	0	
Decommissioned (3)	0	0	

#### 1.8. Authorisation Received

Authorisation is not required.

#### 1.9. Scope of Audit

Reconciliation participant clause 15.38.

- Maintaining registry information and performing switching
- Gathering and storing raw meter data
- Creating and managing
  - HHR volume information
  - NHH volume information
  - Delivery of submission supporting information
  - Provision of submission information

#### 1.10. Summary of previous audit

Not applicable as this is an initial EIPC audit.

## 2. OPERATIONAL INFRASTRUCTURE

### 2.1. Relevant information (Clause 10.6, 11.2, 15.2)

#### Code reference

Clause 10.6, 11.2, 15.2

#### Code related audit information

*A participant must take all practicable steps to ensure that information that the participant is required to provide is:*

- a) complete and accurate*
- b) not misleading or deceptive*
- c) not likely to mislead or deceive.*

*If the participant becomes aware that in providing information under this Part, the participant has not complied with that obligation, the participant must, as soon as practicable, provide such further information as is necessary to ensure that the participant does comply.*

#### Audit observation

We have examined the participants processes and selected outputs from those processes.

#### Audit commentary

We have not identified any instances where the participant has provided any information that is incomplete, inaccurate or in any way misleading or deceptive.

#### Audit outcome

Compliant

### 2.2. Provision of information (Clause 15.35)

#### Code reference

Clause 15.35

#### Code related audit information

*If an obligation exists to provide information in accordance with Part 15, a participant must deliver that information to the required person within the timeframe specified in the Code, or, in the absence of any such timeframe, within any timeframe notified by the Authority. Such information must be delivered in the format determined from time to time by the Authority.*

#### Audit observation

Throughout this audit we have examined selected outputs from the participants processes for the timely delivery of required information.

#### Audit commentary

Two instances of late delivery of submission information to the Reconciliation Manager are identified. These are further discussed in section 12.2 of this report. Raising another non compliance allegation here would cause double counting of the alleged non compliance.

#### Audit outcome

Compliant

## 2.3. Data transmission (Clause 20 Schedule 15.2)

### Code reference

*Clause 20 Schedule 15.2*

### Code related audit information

*Transmissions and transfers of data related to metering information between reconciliation participants or their agents, for the purposes of the Code, must be carried out electronically using systems that ensure the security and integrity of the data transmitted and received.*

### Audit observation

Throughout this audit we have examined selected outputs from the participants processes and the mechanism used for delivery of information.

### Audit commentary

All information has been delivered in a secure manner.

### Audit outcome

Compliant

## 2.4. Audit trails (Clause 21 Schedule 15.2)

### Code reference

*Clause 21 Schedule 15.2*

### Code related audit information

*Each reconciliation participant must ensure that a complete audit trail exists for all data gathering, validation, and processing functions of the reconciliation participant.*

*The audit trail must include details of information:*

- *provided to and received from the registry manager*
- *provided to and received from the reconciliation manager*
- *provided and received from other reconciliation participants and their agents.*

*The audit trail must cover all archived data in accordance with clause 18.*

*The logs of communications and processing activities must form part of the audit trail, including if automated processes are in operation.*

*Logs must be printed and filed as hard copy or maintained as data files in a secure form, along with other archived information.*

*The logs must include (at a minimum) the following:*

- *an activity identifier (clause 21(4)(a))*
- *the date and time of the activity (clause 21(4)(b))*
- *the operator identifier (clause 21(4)(c)).*

### Audit observation

At the commencement of this audit we identified shortcomings in the audit trails produced.

### Audit commentary

The participant developed satisfactory audit trails which have subsequently been used to complete this audit.

## Audit outcome

Compliant

## 2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)

### Code reference

*Clause 10.4*

### Code related audit information

*If a participant must obtain a consumer's consent, approval, or authorisation, the participant must ensure it:*

- *extends to the full term of the arrangement*
- *covers any participants who may need to rely on that consent.*

### Audit observation

We have examined the ID Power terms and conditions document.

### Audit commentary

ID Power have obtained satisfactory consumer consent as required by this clause of the Code.

## Audit outcome

Compliant

## 2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))

### Code reference

*Clause 10.7(2),(4),(5) and (6)*

### Code related audit information

*The responsible reconciliation participant must, if requested, arrange access for the metering installation to the following parties:*

- *the Authority*
- *an ATH*
- *an auditor*
- *an MEP*
- *a gaining metering equipment provider.*

*The trader must use its best endeavours to provide access:*

- *in accordance with any agreements in place*
- *in a manner and timeframe which is appropriate in the circumstances.*

*If the trader has a consumer, the trader must obtain authorisation from the customer for access to the metering installation, otherwise it must arrange access to the metering installation.*

*The reconciliation participant must provide any necessary facilities, codes, keys or other means to enable the party to obtain access to the metering installation by the most practicable means.*

### Audit observation

We have examined the ID Power terms and conditions document.

### Audit commentary

ID Power have obtained satisfactory consumer consent as required by this clause of the Code

### Audit outcome

Compliant

## 2.7. Physical location of metering installations (Clause 10.35(1)&(2))

### Code reference

*Clause 10.35(1)&(2)*

### Code related audit information

*A reconciliation participant responsible for ensuring there is a category 1 metering installation or category 2 metering installation must ensure that the metering installation is located as physically close to a point of connection as practical in the circumstances.*

*A reconciliation participant responsible for ensuring there is a category 3 or higher metering installation must:*

- a) if practical in the circumstances, ensure that the metering installation is located at a point of connection; or*
- b) if it is not practical in the circumstances to locate the metering installation at the point of connection, calculate the quantity of electricity conveyed through the point of connection using a loss compensation process approved by the certifying ATH.*

### Audit observation

It is impractical for us to audit this clause.

### Audit commentary

We note however that all metering installations operated by the participant are certified, this would indicate compliance.

### Audit outcome

Compliant

## 2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)

### Code reference

*Clause 11.15B*

### Code related audit information

*A trader must at all times ensure that the terms of each contract between a customer and a trader permit:*

- the Authority to assign the rights and obligations of the trader under the contract to another trader if the trader commits an event of default under paragraph (a) or (b) or (f) or (h) of clause 14.41 (clause 11.15B(1)(a)); and*
- the terms of the assigned contract to be amended on such an assignment to—*
- the standard terms that the recipient trader would normally have offered to the customer immediately before the event of default occurred (clause 11.15B(1)(b)(i)); or*
- such other terms that are more advantageous to the customer than the standard terms, as the recipient trader and the Authority agree (clause 11.15B(1)(b)(ii); and*

- *the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and*
- *the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under Schedule 11.5 (clause 11.15B(1)(d)); and*
- *the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).*

*The terms specified in subclause (1) must be expressed to be for the benefit of the Authority for the purposes of the Contracts (Privacy) Act 1982, and not be able to be amended without the consent of the Authority (clause 11.15B(2)).*

#### **Audit observation**

We have examined the ID Power terms and conditions document.

#### **Audit commentary**

ID Power have a clause in their terms and conditions that permits the Authority to assign all rights and obligations under this clause.

#### **Audit outcome**

Compliant

### **2.9. Connection of an ICP (Clause 10.32)**

#### **Code reference**

*Clause 10.32*

#### **Code related audit information**

*A reconciliation participant must only request the connection of a point of connection if they:*

- *accept responsibility for their obligations in Parts 10, 11 and 15 for the point of connection; and*
- *have an arrangement with an MEP to provide 1 or more metering installations for the point of connection.*

#### **Audit observation**

ID Power have demonstrated a good understanding of the relevant obligations under the Code, and have an arrangement with each MEP they use.

#### **Audit commentary**

ID Power accept their responsibilities under the Code.

#### **Audit outcome**

Compliant

### **2.10. Temporary Electrical Connection of an ICP (Clause 10.33(1))**

#### **Code reference**

*Clause 10.33(1)*

#### **Code related audit information**

*A reconciliation participant may temporarily electrically connect a point of connection, or authorise an MEP to temporarily electrically connect a point of connection, only if:*

- *they are recorded in the registry as being responsible for the ICP; and*
- *1 or more certified metering installations are in place at the ICP in accordance with Part 10; and*
- *for an ICP that has not previously been electrically connected, the network owner has given written approval.*

#### **Audit observation**

There has not been any instance of temporary electrical connection of an ICP. ID Power have demonstrated a good understanding of the relevant obligations under the Code.

#### **Audit commentary**

ID Power accept their responsibilities under the Code.

#### **Audit outcome**

Compliant

### **2.11. Electrical Connection of Point of Connection (Clause 10.33A)**

#### **Code reference**

*Clause 10.33A(1)*

#### **Code related audit information**

*A reconciliation participant may electrically connect or authorise the electrical connection of a point of connection only if:*

- *they are recorded in the registry as being responsible for the ICP; and*
- *1 or more certified metering installations are in place at the ICP in accordance with Part 10; and*
- *for an ICP that has not previously been electrically connected, the network owner has given written approval.*

#### **Audit observation**

ID Power have demonstrated a good understanding of the relevant obligations under the Code.

During the period of audit ID Power have not connected any ICP that not been previously connected, and have not reconnected any ICP.

#### **Audit commentary**

ID Power accept their responsibilities under the Code.

#### **Audit outcome**

Compliant

### **2.12. Arrangements for line function services (Clause 11.16)**

#### **Code reference**

*Clause 11.16*

#### **Code related audit information**

*Before providing the registry manager with any information in accordance with clause 11.7(2) or clause 11.18(4), a trader must ensure that it, or its customer, has made any necessary arrangements for the provision of line function services in relation to the relevant ICP*



*Before providing the registry manager with any information in accordance with clause 11.7(2) or clause 11.18(4), a trader must have entered into an arrangement with an MEP for each metering installation at the ICP.*

#### **Audit observation**

ID Power have demonstrated agreements with each participant providing them with line function services.

#### **Audit commentary**

ID Power comply with this requirement of the Code.

#### **Audit outcome**

Compliant

### **2.13. Arrangements for metering equipment provision (Clause 10.36)**

#### **Code reference**

*Clause 10.36*

#### **Code related audit information**

*A reconciliation participant must ensure it has an arrangement with the relevant MEP prior to accepting responsibility for an installation.*

#### **Audit observation**

ID Power have demonstrated agreements with all participants who provide them with MEP services.

#### **Audit commentary**

ID Power comply with this requirement of the Code.

#### **Audit outcome**

Compliant

### 3. MAINTAINING REGISTRY INFORMATION

#### 3.1. Obtaining ICP identifiers (Clause 11.3)

##### Code reference

Clause 11.3

##### Code related audit information

*The following participants must, before assuming responsibility for certain points of connection on a local network or embedded network, obtain an ICP identifier for the point of connection:*

- a) a trader who has agreed to purchase electricity from an embedded generator or sell electricity to a consumer*
- b) an embedded generator who sells electricity directly to the clearing manager*
- c) a direct purchaser connected to a local network or an embedded network*
- d) an embedded network owner in relation to a point of connection on an embedded network that is settled by differencing*
- e) a network owner in relation to a shared unmetered load point of connection to the network owner's network*
- f) a network owner in relation to a point of connection between the network owner's network and an embedded network.*

*ICP identifiers must be obtained for points of connection at which any of the following occur:*

- a consumer purchases electricity from a trader 11.3(3)(a)*
- a trader purchases electricity from an embedded generator 11.3(3)(b)*
- a direct purchaser purchases electricity from the clearing manager 11.3(3)(c)*
- an embedded generator sells electricity directly to the clearing manager 11.3(3)(d)*
- a network is settled by differencing 11.3(3)(e)*
- there is a distributor status ICP on the parent network point of connection of an embedded network or at the point of connection of shared unmetered load. 11.3(3)(f)*

##### Audit observation

We have examined the registry record and note that every ICP traded by IDPower has an ICP identifier.

##### Audit commentary

Compliance is observed.

##### Audit outcome

Compliant

#### 3.2. Providing registry information (Clause 11.7(2))

##### Code reference

Clause 11.7(2)

##### Code related audit information

*Each trader must provide information to the registry manager about each ICP at which it trades electricity in accordance with Schedule 11.1.*

##### Audit observation

We have examined the registry record to determine the provision of the required information.

##### Audit commentary

We confirm that IDPower have provided the ICP information required by schedule 11.1.

#### **Audit outcome**

Compliant

### **3.3. Changes to registry information (Clause 10 Schedule 11.1)**

#### **Code reference**

*Clause 10 Schedule 11.1*

#### **Code related audit information**

*If information provided by a trader to the registry manager about an ICP changes, the trader must provide written notice to the registry manager of the change no later than 5 business days after the change.*

#### **Audit observation**

We have examined the registry record of 123 Trader events for the period of audit and found that 22 of the events were backdated in excess of 5 business days. Of the 22 we chose the 14 with the highest number of business days over 5 business days for detailed examination.

#### **Audit commentary**

We examined 14 of these events in detail and found the following common themes emerged:

1. The participant believed they could populate the registry with every profile they might use at an ICP, consequently single meter AMI ICPs had "HHR RPS" provided, although only one of these is ever used at any time. This caused problems and after some discussion with the RM and the EA the participant now understands the registry must only record the profiles being traded for the periods indicated. This issue will not recur.
2. Customer requested backdated switches. Predominantly move in switches.
3. MEP failure to provide promised data - participant backdated change to RPS and read meter themselves.
4. When changing one item of Trader information participant forgot to change the event date resulting in incorrect allocation of the previous event date which was backdated.

The resulting outcome was most of these events were beyond the reasonable control of the participant - the Code needs to recognise that sometimes backdating changes is necessary.

In some instances mistakes were made by the participant, we consider this not unreasonable as this is the first audit of a new entrant who has undergone a very steep learning curve. All instances were discussed in detail with the participant and we believe that where the participant has control of the situation they will not be repeated.

#### **Audit outcome**

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: <i>Clause 10</i> <i>Schedule 11.1</i>  From: 05-Sep-17 To: 25-Jun-18	Failed to provide registry with changed ICP information with 5 business days. Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Participant is aware of their responsibilities and has put in place strong controls to eliminate reoccurrence.		
Actions taken to resolve the issue		Completion date	Remedial action status
Staff training		25/5/2018	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
We have included in our training for staff the training on the requirement to keep the registry updated within the time frame allowed within the code. Our current and future management of ICPs which we are responsible for takes this into account and we keep our ICPs up to date.		25/5/2018	

### 3.4. Trader responsibility for an ICP (Clause 11.18)

#### Code reference

*Clause 11.18*

#### Code related audit information

*A trader becomes responsible for an ICP when the trader is recorded in the registry as being responsible for the ICP.*

*A trader ceases to be responsible for an ICP if:*

- *another trader is recorded in the registry as accepting responsibility for the ICP (clause 11.18(2)(a)); or*
- *the ICP is decommissioned in accordance with clause 20 of Schedule 11.1 (clause 11.18(2)(b)).*
- *if an ICP is to be decommissioned, the trader who is responsible for the ICP must (clause 11.18(3)):*
  - *arrange for a final interrogation to take place prior to or upon meter removal (clause 11.18(3)(a)); and*
  - *advise the MEP responsible for the metering installation of the decommissioning (clause 11.18(3)(b)).*

*A trader who is responsible for an ICP (excluding UML) must ensure that an MEP is recorded in the registry for that ICP (clause 11.18(4)).*

*A trader must not trade at an ICP (excluding UML) unless an MEP is recorded in the registry for that ICP (clause 11.18(5)).*

#### **Audit observation**

We have examined the registry record and find that for all ICPs traded throughout the audit period an MEP is recorded in the registry.

#### **Audit commentary**

Compliance is confirmed.

#### **Audit outcome**

Compliant

### **3.5. Provision of information to the registry manager (Clause 9 Schedule 11.1)**

#### **Code reference**

*Clause 9 Schedule 11.1*

#### **Code related audit information**

*Each trader must provide the following information to the registry manager for each ICP for which it is recorded in the registry as having responsibility:*

- a) the participant identifier of the trader, as approved by the Authority (clause 9(1)(a))*
- b) the profile code for each profile at that ICP, as approved by the Authority (clause 9(1)(b))*
- c) the metering equipment provider for each category 1 metering or higher (clause 9(1)(c))*
- d) the type of submission information the trader will provide to the RM for the ICP (clause 9(1)(ea))*
- e) if a settlement type of UNM is assigned to that ICP, either:*
  - the code ENG if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*
  - in all other cases, the daily average kWh of unmetered load at the ICP (clause 9(1)(f)(ii)).*
  - the type and capacity of any unmetered load at each ICP (clause 9(1)(g))*
  - the status of the ICP, as defined in clauses 12 to 20 (clause 9(1)(j))*
  - except if the ICP exists for the purposes of reconciling an embedded network or the ICP has distributor status, the trader must provide the relevant business classification code applicable to the customer (clause 9(1)(k)).*

*The trader must provide information specified in (a) to (j) above within 5 business days of trading (clause 9(2)).*

*The trader must provide information specified in 9(1)(k) no later than 20 business days of trading (clause 9(3)).*

#### **Audit observation**

In practice the majority of the Trader events in which this information was provided occurred as a result of switching in new customers and the provision of the relevant data is discussed and analysed in section 3.3 above which is primarily focused on the 5 business day requirement.

As discussed in section 3.3 there were some issues arising with the provision of profile code, these are now fully resolved and we do not expect any repeat occurrence.

ANZSIC codes were checked against Google maps for 10 ICPs. The sample was semi-random with some bias toward non residential.

### Audit commentary

Alleged non compliance is identified as in section 3.3 of this audit report - the sampled ANZSIC codes appear correct as far as can be judged using Google maps. This is in effect a duplicate allegation of non compliance which we are obliged to report as such by the Authority.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: <i>Clause 9 Schedule 11.1</i>  From: 05-Sep-17 To: 25-Jun-18	Provision of incorrect profile information.  Potential impact: None  Actual impact: None  Audit history: None  Controls: Strong  Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Participant is now aware of how profiles are presented on the registry and has provided them correctly on subsequent occasions.		
Actions taken to resolve the issue		Completion date	Remedial action status
Staff training		25/5/2018	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
We have included in our training for staff the training on the requirement to keep the registry updated within the time frame allowed within the code. Our current and future management of ICPs which we are responsible for takes this into account and we keep our ICPs up to date.		25/5/2018	

### 3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)

#### Code reference

*Clause 9 (1(k) of Schedule 11.1*

#### Code related audit information

*Traders are responsible to populate the relevant ANZSIC code for all ICPs for which they are responsible.*

#### Audit observation

ANZSIC codes were checked against Google maps for 10 ICPs. The sample was semi-random with some bias toward non residential.

### Audit commentary

The sampled ANZSIC codes appear correct as far as can be judged using Google maps, compliance is confirmed.

### Audit outcome

Compliant

## 3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)

### Code reference

*Clause 9(1)(f) of Schedule 11.1*

### Code related audit information

*if a settlement type of UNM is assigned to that ICP, the trader must populate:*

*the code ENG - if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*

*the daily average kWh of unmetered load at the ICP - in all other cases (clause 9(1)(f)(ii)).*

### Audit observation

The participant does not trade any UNM.

### Audit commentary

Not applicable

### Audit outcome

Not applicable

## 3.8. Management of “active” status (Clause 17 Schedule 11.1)

### Code reference

*Clause 17 Schedule 11.1*

### Code related audit information

*The ICP status of “active” is be managed by the relevant trader and indicates that:*

- *the associated electrical installations are electrically connected (clause 17(1)(a))*
- *the trader must provide information related to the ICP in accordance with Part 15, to the reconciliation manager for the purpose of compiling reconciliation information (clause 17(1)(b)).*

*Before an ICP is given the “active” status, the trader must ensure that:*

- *the ICP has only 1 customer, embedded generator, or direct purchaser (clause 17(2)(a))*
- *the electricity consumed is quantified by a metering installation or a method of calculation approved by the Authority (clause 17(2)(b)).*

10/4/18 Discussion with Michael - as recorded below.

### Audit observation

The registry record was examined for status changes and only one event (ICP 0000960120TEDBC) was identified where ICP status was changed. The change was remote disconnection and reconnection due to non payment.

It transpired that when switched in the ICP was remotely disconnected however the registry did not record this. The participant recorded the subsequent reconnection (change to active status) correctly on the registry.

#### Audit commentary

The participant initially updated the ICP status to active on having the connection remotely restored. At a later date the customer had failed to pay and was remotely disconnected. The following day power was restored after the customer had paid. The correct sequence of status changes was made in the registry by the participant.

We also discussed the process with the participant and find their knowledge of the requirements and the outcome of their actions complies with the Code.

#### Audit outcome

Compliant

### 3.9. Management of “inactive” status (Clause 19 Schedule 11.1)

#### Code reference

*Clause 19 Schedule 11.1*

#### Code related audit information

*The ICP status of “inactive” must be managed by the relevant trader and indicates that:*

- *electricity cannot flow at that ICP (clause 19(a)); or*
- *submission information related to the ICP is not required by the reconciliation manager for the purpose of compiling reconciliation information (clause 19(b)).*

#### Audit observation

See above for Active status.

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1)

#### Code reference

*Clause 15 Schedule 11.1*

#### Code related audit information

*If an ICP has had the status of "New" or "Ready" for 24 calendar months or more, the distributor must ask the trader whether it should continue to have that status, and must decommission the ICP if the trader advises the ICP should not continue to have that status.*

#### Audit observation

This is a distributor obligation and has no relevance within a reconciliation participant audit.

#### Audit commentary

Not applicable.



**Audit outcome**

Not applicable

## 4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

### Process overview

Outgoing switches are generated by the IDPL system based on information input by IDPL staff - some functionality is also implemented directly via the registry web interface.

Incoming files from the registry are imported to the IDPL system - a system alert is generated and the operator then views the incoming switch files manually. Some functionality is initiated semi automatically within the system (eg AW) and some management functionality implemented via the web interface.

### Common matters

Being a new retailer IDPL have to date mostly created switch requests - we have identified 4 incoming NW switch requests all of which have been examined, and we find IDPL has responded in a compliant manner to each request.

Where a switch in is for an AMI meter and the losing trader reconciles the consumption NHH and the gaining trader reconciles HHR there can be an issue around timing of revised meter readings provided back to the losing retailer. IDPL have in the past provided revised reads and traded these ICPs HHR, but have now adopted a policy whereby if a meter is being traded NHH by the losing retailer IDPL will trade it NHH for an initial period using the provided switch meter read. This eliminates the potential for alleged non compliance by either retailer for failing to use the same switch meter read.

The switch compliance report was obtained from the registry covering the period of audit. This report identifies that for 2 (out of 80) ICPs switched in by IDPL there were minor breaches of switching times, these were both late AW messages (at 6 and 1 business days respectively).

The switch compliance report identifies an additional breach which when the detail is examined is incorrect - there were a total of 4 NW messages sent to IDPL during this rather protracted switching sequence and the registry has incorrectly identified completion of one sequence using a non sequential AW event.

Other than the 2 identified very minor alleged breaches of switch timing all switches have proceeded according to the requirements of the Code.

IDPL do not directly solicit customers door to door, the uninvited direct sale agreement process is not relevant.

### Standard (occupied) switch

#### 4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3)

##### Code reference

*Clause 2 Schedule 11.3*

##### Code related audit information

*The standard switch process applies where a trader and a customer or embedded generator enters into an arrangement in which the trader commences trading electricity with the customer or embedded generator at a non-half hour or unmetered ICP at which another trader supplies electricity, or the trader assumes responsibility for such an ICP.*

*If the uninvited direct sale agreement applies to an arrangement described above, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.*

*A gaining trader must advise the registry manager of a switch no later than 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and 1 or more profile codes associated with that ICP.*

#### **Audit observation**

The date on which an arrangement comes into effect is not practically auditable and is therefore not examined here.

In all instances the participant has provided an initial NT along with the required TR code (where the switch is type TR) and one or more profile codes.

#### **Audit commentary**

Compliance is confirmed.

#### **Audit outcome**

Compliant

### **4.2. Losing trader response to switch request and event dates - standard switch (Clauses 3 and 4 Schedule 11.3)**

#### **Code reference**

*Clauses 3 and 4 Schedule 11.3*

#### **Code related audit information**

*Within 3 business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12 month period, at least 50% of the event dates must be no more than 5 business days after the date of notification. The losing trader must then:*

- *provide acknowledgement of the switch request by (clause 3(a) of Schedule 11.3):*
- *providing the proposed event date to the registry manager and a valid switch response code (clause 3(a)(i) and (ii) of Schedule 11.3); or*
- *providing a request for withdrawal of the switch in accordance with clause 17 (clause 3(c) of Schedule 11.3).*

*When establishing an event date for clause 4, the losing trader must disregard every event date established by the losing trader for a customer who has been with the losing trader for less than 2 calendar months (clause 4(2) of Schedule 11.3).*

#### **Audit observation**

Four instances are identified during the period of audit where IDPL received NT requests. Events for all of these were examined for compliance.

#### **Audit commentary**

In all four instances examined IDPL responded to the gaining trader within the required timeframe and used the switch date proposed by the gaining trader.

Compliance is confirmed.

#### **Audit outcome**

Compliant

### **4.3. Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3)**

## Code reference

Clause 5 Schedule 11.3

## Code related audit information

*If the losing trader provides information to the registry manager in accordance with clause 3(a) of Schedule 11.3 with the required information, no later than 5 business days after the event date, the losing trader must complete the switch by:*

- *providing event date to the registry manager (clause 5(a)); and*
- *provide to the gaining trader a switch event meter reading as at the event date, for each meter or data storage device that is recorded in the registry with accumulator of C and a settlement indicator of Y (clause 5(b)); and*
- *if a switch event meter reading is not a validated reading, provide the date of the last meter reading (clause 5(c)).*

## Audit observation

Four instances are identified during the period of audit where IDPL were the losing trader. Events for all of these were examined for compliance. In all instances the switch was correctly completed within the requires period of time.

## Audit commentary

Compliance is confirmed.

## Audit outcome

Compliant

## 4.4. Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3)

## Code reference

Clause 6(1) and 6A Schedule 11.3

## Code related audit information

*The losing trader and the gaining trader must both use the same switch event meter reading as determined by the following procedure:*

- *if the switch event meter reading provided by the losing trader differs by less than 200 kWh from a value established by the gaining trader, the gaining trader must use the losing trader's validated meter reading or permanent estimate (clause 6(a)); or*
- *the gaining trader may dispute the switch meter reading if the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more. (clause 6(b)).*

*If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within 4 calendar months of the actual event date, provide to the losing trader a changed switch event meter reading supported by 2 validated meter readings.*

- *the losing trader can choose not to accept the reading, however must advise the gaining trader no later than 5 business days after receiving the switch event meter reading from the gaining trader (clause 6A(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 6A(b)).*

### Audit observation

We have examined the registry record and the participants HHR meter reading records. A sample of 17 outgoing ICP switches were chosen at random from the 137 NT events recorded. In all instances examined the participant either

1. switched the ICP in HHR to HHR in which case meter readings are irrelevant,
2. Switched NHH to HHR where a revised switch read was provided to the losing trader from AMI data, or
3. Switched in NHH to NHH (changing to HHR at a later date) where the losing retailer supplied switch read was used.

### Audit commentary

In all cases examined compliance was confirmed. This result combined with our process walkthrough and general discussion indicates a very high level of understanding of the requirements precluding the need for further detailed examination.

### Audit outcome

Compliant

## 4.5. Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule 11.3)

### Code reference

*Clause 6(2) and (3) Schedule 11.3*

### Code related audit information

*If the losing trader trades electricity from a non-half hour meter, with a switch event meter reading that is not from an AMI certified meter flagged Y in the registry: and*

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 6(2)(b));*
- *the gaining trader within 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading.*

### Audit observation

There were no incoming switch requests resulting in a switch read revision from AMI metering. We note that the participant is well aware of the Code requirement.

### Audit commentary

Not applicable

### Audit outcome

Not applicable

## 4.6. Disputes - standard switch (Clause 7 Schedule 11.3)

### Code reference

*Clause 7 Schedule 11.3*

### Code related audit information

*A losing trader or gaining trader may give written notice to the other that it disputes a switch event meter reading provided under clauses 1 to 6. Such a dispute must be resolved in accordance with clause 15.29 (with all necessary amendments).*

#### **Audit observation**

No switch disputes are identified.

#### **Audit commentary**

Not auditable hence not applicable at this time.

#### **Audit outcome**

Not applicable

### **Move In Switch**

#### **4.7. Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3)**

##### **Code reference**

*Clause 9 Schedule 11.3*

##### **Code related audit information**

*The switch move process applies where a gaining trader has an arrangement with a customer or embedded generator to trade electricity at an ICP using non half-hour metering or an unmetered ICP, or to assume responsibility for such an ICP, and no other trader has an agreement to trade electricity at that ICP, this is referred to as a switch move and the following provisions apply:*

*If the "uninvited direct sale agreement" applies, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.*

*In the event of a switch move, the gaining trader must advise the registry manager of a switch and the proposed event date no later than 2 business days after the arrangement comes into effect.*

*In its advice to the registry manager the gaining trader must include:*

- a proposed event date (clause 9(2)(a)); and*
- that the switch type is "MI" (clause 9(2)(b)); and*
- one or more profile codes of a profile at the ICP. (clause 9(2)(c))*

##### **Audit observation**

The date on which an arrangement comes into effect is not practically auditable and is therefore not examined here.

In all instances the participant has provided an initial NT along with the required MI code (where the switch is type MI) and one or more profile codes.

##### **Audit commentary**

Compliance is confirmed.

##### **Audit outcome**

Compliant

#### 4.8. Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)

##### Code reference

*Clause 10(1) Schedule 11.3*

##### Code related audit information

*10(1) Within 5 business days after receiving notice of a switch move request from the registry manager—*

- *10(1)(a) If the losing trader accepts the event date proposed by the gaining trader, the losing trader must complete the switch by providing to the registry manager:*
  - o *confirmation of the switch event date; and*
  - o *a valid switch response code; and*
  - o *final information as required under clause 11; or*
- *10(1)(b) If the losing trader does not accept the event date proposed by the gaining trader, the losing trader must acknowledge the switch request to the registry manager and determine a different event date that—*
  - o *is not earlier than the gaining trader's proposed event date, and*
  - o *is no later than 10 business days after the date the losing trader receives notice; or*
- *10(1)(c) request that the switch be withdrawn in accordance with clause 17.*

##### Audit observation

There have not been any instances where IDPL is recorded as the losing trader for a MI switch.

##### Audit commentary

Not auditable.

##### Audit outcome

Not applicable

#### 4.9. Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)

##### Code reference

*Clause 10(2) Schedule 11.3*

##### Code related audit information

*If the losing trader determines a different date, the losing trader must also complete the switch by providing to the registry manager as described in subclause (1)(a):*

- *the event date proposed by the losing trader; and*
- *a valid switch response code; and*
- *final information as required under clause 1.*

##### Audit observation

There have not been any instances where IDPL is recorded as the losing trader for a MI switch.

##### Audit commentary

Not auditable

##### Audit outcome

Not applicable

#### 4.10. Losing trader must provide final information - switch move (Clause 11 Schedule 11.3)

## Code reference

Clause 11 Schedule 11.3

## Code related audit information

*The losing trader must provide final information to the registry manager for the purposes of clause 10(1)(a)(ii), including—*

- *the event date (clause 11(a)); and*
- *a switch event meter reading as at the event date for each meter or data storage device that is recorded in the registry with an accumulator type of C and a settlement indicator of Y (clause 11(b)); and*
- *if the switch event meter reading is not a validated meter reading, the date of the last meter reading of the meter or storage device. (clause 11(c)).*

## Audit observation

There have not been any instances where IDPL is recorded as the losing trader for a MI switch.

## Audit commentary

Not auditable.

## Audit outcome

Not applicable

### 4.11. Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3)

## Code reference

Clause 12 Schedule 11.3

## Code related audit information

*The gaining trader may use the switch event meter reading supplied by the losing trader or may, at its own cost, obtain its own switch event meter reading. If the gaining trader elects to use this new switch event meter reading, the gaining trader must advise the losing trader of the switch event meter reading and the actual event date to which it refers as follows:*

- *if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or*
- *if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter reading. In this case, the gaining trader, within 4 calendar months of the actual event date, must provide to the losing trader a changed validated meter reading or a permanent estimate supported by 2 validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):*
- *advise the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 12(3)(b)).*

*12(2A) If the losing trader trades electricity from a non-half hour meter, with a switch event meter reading that is not from an AMI certified meter flagged Y in the registry,*



- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 12(2A)(b));*
- *the gaining trader no later than 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading. (clause 12(2B)).*

#### **Audit observation**

The switches examined and reported in section 4 General matters and section 4.4 included a sample of MI switches.

#### **Audit commentary**

As discussed in section 4.4 compliance is confirmed.

#### **Audit outcome**

Compliant

#### **TOU HHR Switch**

#### **4.12. Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedule 11.3)**

##### **Code reference**

*Clause 13 Schedule 11.3*

##### **Code related audit information**

*The gaining trader switch process applies when a trader has an arrangement with a customer or embedded generator to trade electricity through or assume responsibility for:*

- *a half hour metering installation (that is not a category 1 or 2 metering installation) at an ICP with a submission type of half hour in the registry and an AMI flag of "N"; or*
- *a half hour metering installation at an ICP that has a submission type of half hour in the registry and an AMI flag of "N" and is traded by the losing trader as non-half hour; or*
- *a non half hour metering installation at an ICP at which the losing trader trades electricity through a half hour metering installation with an AMI flag of "N".*

*If the uninvited direct sale agreement applies to an arrangement described above, the gaining trader must identify the period within which the customer or embedded generator may cancel the arrangement in accordance with section 36M of the Fair Trading Act 1986. The arrangement is deemed to come into effect on the day after the expiry of that period.*

*A gaining trader must advise the registry manager of the switch and expected event date no later than 3 business days after the arrangement comes into effect.*

*14(2) The gaining trader must include in its advice to the registry manager:*

- a) *a proposed event date; and*
- b) *that the switch type is HH.*

*14(3) The proposed event date must be a date that is after the date on which the gaining trader advises the registry manager, unless clause 14(4) applies.*

*14(4) The proposed event date is a date before the date on which the gaining trader advised the registry manager, if:*

- 14(4)(a) – the proposed event date is in the same month as the date on which the gaining trader advised the registry manager; or*

*14(4)(b) – the proposed event date is no more than 90 days before the date on which the gaining trader advises the registry manager and this date is agreed between the losing and gaining traders.*

**Audit observation**

There have not been any switches of the type HH.

**Audit commentary**

Not auditable.

**Audit outcome**

Not applicable

**4.13. Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3)**

**Code reference**

*Clause 15 Schedule 11.3*

**Code related audit information**

*Within 3 business days after the losing trader is informed about the switch by the registry manager, the losing trader must:*

*15(a) - provide to the registry manager a valid switch response code as approved by the Authority; or*

*15(b) - provide a request for withdrawal of the switch in accordance with clause 17.*

**Audit observation**

There have not been any switches of the type HH.

**Audit commentary**

Not auditable.

**Audit outcome**

Not applicable

**4.14. Gaining trader to advise the registry manager - gaining trader switch (Clause 16 Schedule 11.3)**

**Code reference**

*Clause 16 Schedule 11.3*

**Code related audit information**

*The gaining trader must complete the switch no later than 3 business days, after receiving the valid switch response code, by advising the registry manager of the event date.*

*If the ICP is being electrically disconnected, or if metering equipment is being removed, the gaining trader must either-*

*16(a)- give the losing trader or MEP for the ICP an opportunity to interrogate the metering installation immediately before the ICP is electrically disconnected or the metering equipment is removed; or*

*16(b)- carry out an interrogation and, no later than 5 business days after the metering installation is electrically disconnected or removed, advise the losing trader of the results and metering component numbers for each data channel in the metering installation.*

#### **Audit observation**

There have not been any switches of the type HH.

#### **Audit commentary**

Not auditable.

#### **Audit outcome**

Not applicable

#### **Withdrawing a switch**

### **4.15. Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3)**

#### **Code reference**

*Clauses 17 and 18 Schedule 11.3*

#### **Code related audit information**

*A losing trader or gaining trader may request that a switch request be withdrawn at any time until the expiry of 2 calendar months after the event date of the switch.*

*If a trader requests the withdrawal of a switch, the following provisions apply:*

- *for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):*
  - o *the participant identifier of the trader making the withdrawal request (clause 18(c)(i)); and*
  - o *the withdrawal advisory code published by the Authority. (clause 18(c)(ii))*
- *within 5 business days after receiving notice from the registry manager of a switch, the trader receiving the withdrawal must advise the registry manager that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the trader who received the withdrawal. (clause 18(d))*
- *on receipt of a rejection notice from the registry manager, in accordance with clause 18(d), a trader may re-submit the switch withdrawal request for an ICP in accordance with clause 18(c). All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request. (clause 18(e))*
- *if the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within 2 business days after receiving notice from the registry manager in accordance with clause 22(b), the losing trader must comply with clauses 3,5,10 and 11 (whichever is appropriate) and the gaining trader must comply with clause 16. (clause 18(f))*

#### **Audit observation**

We have examined all 21 NW events recorded on the registry for the period of audit. 1 was generated by IDPL the remainder by other traders.

In all instances IDPO responded to an NW with an AW on the same day (response is automated) and used a correct response code. In all instances the withdrawal was resolved within the required 10 business days and the required information was provided to all parties.

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 4.16. Metering information (Clause 21 Schedule 11.3)

#### Code reference

*Clause 21 Schedule 11.3*

#### Code related audit information

*For an interrogation or validated meter reading or permanent estimate carried out in accordance with Schedule 11.3:*

*21(a)- the trader who carries out the interrogation, switch event meter reading must ensure that the interrogation is as accurate as possible, or that the switch event meter reading is fair and reasonable.*

*21(b) and (c) - the cost of every interrogation or switch event meter reading carried out in accordance with clauses 5(b) or 11(b) or (c) must be met by the losing trader. The costs in every other case must be met by the gaining trader.*

#### Audit observation

The participants meter reading compliance is evaluated in section 4.4 of this report. All switch read revisions are generated from AMI data.

An examination of switch read revisions in section 4.4 above indicates the process employed by IDPO is as accurate as is possible and is fair.

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 4.17. Switch saving protection (Clause 11.15AA to 11.15AB)

#### Code reference

*Clause 11.15AA to 11.15AB*

#### Code related audit information

*A trader that buys electricity from the clearing manager may elect to have a switch saving protection by giving notice to the Authority in writing.*

*If a protected trader enters into an arrangement with a customer of another trader (the losing trader), or a trader enters into an arrangement with a customer of a protected trader, to commence trading electricity with the customer, the losing trader must not, by any means, initiate contact with the customer to attempt to persuade the customer to terminate the arrangement during the period from the receipt of the NT to the event date of the switch including by:*

*11.15AB(4)(a)- making a counter offer to the customer; or*

*11.15AB(4)(b)- offering an enticement to the customer.*

**Audit observation**

We have found no evidence that would suggest IDPO may have breached the switch savings protection requirements.

**Audit commentary**

Compliance is confirmed.

**Audit outcome**

Compliant

## 5. MAINTENANCE OF UNMETERED LOAD

**Note that the participant has not traded any unmetered load - therefore this section is not applicable.**

### 5.1. Maintaining shared unmetered load (Clause 11.14)

#### Code reference

Clause 11.14

#### Code related audit information

*The trader must adhere to the process for maintaining shared unmetered load as outlined in clause 11.14:*

*11.14(2) - The distributor must give written notice to the traders responsible for the ICPs across which the unmetered load is shared, of the ICP identifiers of the ICPs.*

*11.14(3) - A trader who receives such a notification from a distributor must give written notice to the distributor if it wishes to add or omit any ICP from the ICPs across which unmetered load is to be shared.*

*11.14(4) - A distributor who receives such a notification of changes from the trader under (3) must give written notice to the registry manager and each trader responsible for any of the ICPs across which the unmetered load is shared.*

*11.14(5) - If a distributor becomes aware of any change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must give written notice to all traders affected by that change as soon as practicable after that change or decommissioning.*

*11.14(6) - Each trader who receives such a notification must, as soon as practicable after receiving the notification, adjust the unmetered load information for each ICP in the list for which it is responsible to ensure that the entire shared unmetered load is shared equally across each ICP.*

*11.14(7) - A trader must take responsibility for shared unmetered load assigned to an ICP for which the trader becomes responsible as a result of a switch in accordance with Part 11.*

*11.14(8) - A trader must not relinquish responsibility for shared unmetered load assigned to an ICP if there would then be no ICPs left across which that load could be shared.*

*11.14(9) - A trader can change the status of an ICP across which the unmetered load is shared to inactive status, as referred to in clause 19 of Schedule 11.1. In that case, the trader is not required to give written notice to the distributor of the change. The amount of electricity attributable to that ICP becomes UFE.*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

### 5.2. Unmetered threshold (Clause 10.14 (2)(b))

#### Code reference

Clause 10.14 (2)(b)

#### Code related audit information

*The reconciliation participant must ensure that unmetered load does not exceed 3,000 kWh per annum, or 6,000 kWh per annum if the load is predictable and of a type approved and published by the Authority.*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

### 5.3. Unmetered threshold exceeded (Clause 10.14 (5))

#### Code reference

Clause 10.14 (5)

#### Code related audit information

*If the unmetered load limit is exceeded the retailer must:*

- *within 20 business days, commence corrective measure to ensure it complies with Part 10*
- *within 20 business days of commencing the corrective measure, complete the corrective measures*
- *no later than 10 business days after it becomes aware of the limit having been exceeded, advise each participant who is or would be expected to be affected of:*
  - o *the date the limit was calculated or estimated to have been exceeded*
  - o *the details of the corrective measures that the MEP proposes to take or is taking to reduce the unmetered load.*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

### 5.4. Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B)

#### Code reference

Clause 11 Schedule 15.3, Clause 15.37B

#### Code related audit information

*An up-to-date database must be maintained for each type of distributed unmetered load for which the retailer is responsible. The information in the database must be maintained in a manner that the resulting submission information meets the accuracy requirements of clause 15.2.*

*A separate audit is required for distributed unmetered load data bases.*

*The database must satisfy the requirements of Schedule 15.5 with regard to the methodology for deriving submission information.*

**Audit observation**

**Audit commentary**

**Audit outcome**

Not applicable



## 6. GATHERING RAW METER DATA

### Overview

AMI meter readings and half-hour metering information is gathered by

- Vector (AMS) - MEP BOS
- Metrix meter reads only - MEP BOS
- FCLM - MEP BOS

Meter readings are gathered by

- Wells - Agent (Audit report provided).

### 6.1. Electricity conveyed & notification by embedded generators(Clause 10.13, Clause 10.24 and 15.13)

#### Code reference

*Clause 10.13, Clause 10.24 and Clause 15.13*

#### Code related audit information

*A participant must use the quantity of electricity measured by a metering installation as the raw meter data for the quantity of electricity conveyed through the point of connection.*

*This does not apply if data is estimated or gifted in the case of embedded generation under clause 15.13.*

*A trader must, for each electrically connected ICP that is not also an NSP, and for which it is recorded in the registry as being responsible, ensure that:*

- *there is 1 or more metering installations*
- *all electricity conveyed is quantified in accordance with the Code*
- *it does not use subtraction to determine submission information for the purposes of Part 15.*

*An embedded generator must give notification to the reconciliation manager for an embedded generating station, if the intention is that the embedded generator will not be receiving payment from the clearing manager or any other person through the point of connection to which the notification relates.*

#### Audit observation

We have examined the processes and results of those processes as recorded throughout this audit report.

#### Audit commentary

We confirm that each metered ICP has one or more metering installation and that all electricity conveyed is quantified in accordance with the Code, and that subtraction is not used for the purpose of determining submission volumes.

We confirm the participant does not trade any qualifying embedded generating stations.

#### Audit outcome

Compliant

### 6.2. Responsibility for metering at GIP(Clause 10.26 (6), (7) and (8))

#### Code reference

*Clause 10.26 (6), (7) and (8)*

### Code related audit information

*For each proposed metering installation or change to a metering installation that is a connection to the grid, the participant, must:*

- *provide to the grid owner a copy of the metering installation design (before ordering the equipment)*
- *provide at least 3 months for the grid owner to review and comment on the design*
- *respond within 3 business days of receipt to any request from the grid owner for additional details or changes to the design*
- *ensure any reasonable changes from the grid owner are carried out.*

*The participant responsible for the metering installation must:*

- *advise the reconciliation manager of the certification expiry date not later than 10 business days after certification of the metering installation*
- *become the MEP or contract with a person to be the MEP*
- *advise the reconciliation manager of the MEP identifier no later than 20 days after entering into a contract or assuming responsibility to be the MEP.*

### Audit observation

### Audit commentary

The participant is not responsible for any metering at any GIP.

### Audit outcome

Not applicable

## 6.3. Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3)

### Code reference

*Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3*

### Code related audit information

*The reconciliation participant must advise the metering equipment provider if a control device is used to control load or switch meter registers.*

*The reconciliation participant must ensure the control device is certified prior to using it for reconciliation purposes.*

### Audit observation

The participant does not trade any profiles where a control device is used to determine submission information.

### Audit commentary

Not applicable.

### Audit outcome

Not applicable

## 6.4. Reporting of defective metering installations (Clause 10.43(2) and (3))

### Code reference

Clause 10.43(2) and (3)

#### Code related audit information

*If a participant becomes aware of an event or circumstance that lead it to believe a metering installation could be inaccurate, defective, or not fit for purpose they must:*

- *advise the MEP*
- *include in the advice all relevant details.*

#### Audit observation

There have not been any defective metering installations identified.

#### Audit commentary

The participant has a process in place for having defective metering fixed - and understands the need to create and submit permanent estimates for any consumption not recorded by the defective metering.

The process is compliant.

#### Audit outcome

Compliant

### 6.5. Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2)

#### Code reference

Clause 2 Schedule 15.2

#### Code related audit information

*Only a certified reconciliation participant may collect raw meter data, unless only the MEP can interrogate the meter, or the MEP has an arrangement which prevents the reconciliation participant from electronically interrogating the meter:*

*2(2) - The reconciliation participant must collect raw meter data used to determine volume information from the services interface or the metering installation or from the MEP.*

*2(3) - The reconciliation participant must ensure the interrogation cycle is such that it does not exceed the maximum interrogation cycle in the registry .*

*2(4) - The reconciliation participant must interrogate the meter at least once every maximum interrogation cycle.*

*2(5) - When electronically interrogating the meter the participant must:*

- a) *ensure the system is to within +/- 5 seconds of NZST or NZDST*
- b) *compare the meter time to the system time*
- c) *determine the time error of the metering installation*
- d) *if the error is less than the maximum permitted error, correct the meter's clock*
- e) *if the time error is greater than the maximum permitted error then:*
  - i) *correct the metering installation's clock*
  - ii) *compare the metering installation's time with the system time*
  - iii) *correct any affected raw meter data.*
- f) *download the event log.*

*2(6) – The interrogation systems must record:*

- *the time*
- *the date*

- *the extent of any change made to the meter clock.*

#### **Audit observation**

The participant does not collect any HHR raw meter data.

#### **Audit commentary**

Not applicable

#### **Audit outcome**

Not applicable

### **6.6. Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)**

#### **Code reference**

*Clause 3(1), 3(2) and 5 Schedule 15.2*

#### **Code related audit information**

*All meter readings must in accordance with the participants certified processes and procedures and using its certified facilities be sourced directly from raw meter data and, if appropriate, be derived and calculated from financial records.*

*All validated meter readings must be derived from meter readings.*

*A meter reading provided by a consumer may be used as a validated meter reading only if another set of validated meter readings not provided by the consumer are used during the validation process.*

*During the manual interrogation of each NHH metering installation the reconciliation participant must:*

- a) obtain the meter register*
- b) ensure seals are present and intact*
- c) check for phase failure (if supported by the meter)*
- d) check for signs of tampering and damage*
- e) check for electrically unsafe situations.*

*If the relevant parts of the metering installation are visible and it is safe to do so.*

#### **Audit observation**

The participant does a very small number of NHH meter reads themselves and is aware of these requirements.

#### **Audit commentary**

Compliance is confirmed

#### **Audit outcome**

Compliant

### **6.7. NHH meter reading application (Clause 6 Schedule 15.2)**

#### **Code reference**

*Clause 6 Schedule 15.2*

#### **Code related audit information**

*For NHH switch event meter reads, for the gaining trader the reading applies from 0000 hours on the day of the relevant event date and for the losing trader at 2400 hours at the end of the day before the relevant event date.*

*In all other cases, All NHH readings apply from 0000hrs on the day after the last meter interrogation up to and including 2400hrs on the day of the meter interrogation.*

#### **Audit observation**

The audit trail at the commencement of the audit did not adequately support discovery of the information that would allow us to confirm correct application of switch meter readings.

Audit trail functionality developed during the audit has demonstrated the correct application of meter readings as the gaining trader. We have observed the software code used in the case of losing trader and confirm it correctly applies the switch meter read to calculate consumption for the last day traded prior to the switch out.

#### **Audit commentary**

The participant is applying switch meter readings in compliance with the code.

#### **Audit outcome**

Compliant

### **6.8. Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)**

#### **Code reference**

*Clause 7(1) and (2) Schedule 15.2*

#### **Code related audit information**

*Each reconciliation participant must ensure that a validated meter reading is obtained in respect of every meter register for every non half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, and used to create volume information.*

*This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.*

*If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 7(1).*

#### **Audit observation**

Four ICPs are identified as having been switched out by the participant, two of these were traded NHH. I confirm that for the two that were traded NHH a validated meter read was obtained during the period of supply.

#### **Audit commentary**

Compliance is confirmed.

#### **Audit outcome**

Compliant

### **6.9. NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)**

#### **Code reference**

Clause 8(1) and (2) Schedule 15.2

#### Code related audit information

*At least once every 12 months, each reconciliation participant must obtain a validated meter reading for every meter register for non half hour metered ICPs, at which the reconciliation participant trades continuously for each 12 month period.*

*If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 8(1).*

#### Audit observation

The participant has not yet traded any ICP for 12 months.

#### Audit commentary

Not applicable

#### Audit outcome

Not applicable

### 6.10. NHH meters 90% read rate (Clause 9(1) and (2) Schedule 15.2)

#### Code reference

Clause 9(1) and (2) Schedule 15.2

#### Code related audit information

*In relation to each NSP, each reconciliation participant must ensure that for each NHH ICP at which the reconciliation participant trades continuously for each 4 months, for which consumption information is required to be reported into the reconciliation process. A validated meter reading is obtained at least once every 4 months for 90% of the non half hour metered ICPs.*

*A report is to be sent to the Authority providing the percentage, in relation to each NSP, for which consumption information has been collected no later than 20 business days after the end of each month.*

*If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 9(1).*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

### 6.11. NHH meter interrogation log (Clause 10 Schedule 15.2)

#### Code reference

Clause 10 Schedule 15.2

#### Code related audit information

*The following information must be logged as the result of each interrogation of the NHH metering:*

*10(a) - the means to establish the identity of the individual meter reader*

*10(b) - the ICP identifier of the ICP, and the meter and register identification*

*10(c) - the method being used for the interrogation and the device ID of equipment being used for interrogation of the meter.*

*10(d) - the date and time of the meter interrogation.*

#### **Audit observation**

Meter reading and half hour metering information interrogation logs are maintained by MEP's and the meter reading agent Wells.

#### **Audit commentary**

I have examined the Wells audit report in which there is no alleged non compliance identified. I have also examined the information stored and logged by the participant and determined that all required information is being provided.

#### **Audit outcome**

Compliant

### **6.12. HHR data collection (Clause 11(1) Schedule 15.2)**

#### **Code reference**

*Clause 11(1) Schedule 15.2*

#### **Code related audit information**

*Raw meter data from all electronically interrogated metering installations must be obtained via the services access interface.*

*This may be carried out by a portable device or remotely.*

#### **Audit observation**

All HHR meter data collection is performed by an MEP.

#### **Audit commentary**

Not applicable.

#### **Audit outcome**

Not applicable

### **6.13. HHR interrogation data requirement (Clause 11(2) Schedule 15.2)**

#### **Code reference**

*Clause 11(2) Schedule 15.2*

#### **Code related audit information**

*The following information is collected during each interrogation:*

*11(2)(a) - the unique identifier of the data storage device*

*11(2)(b) - the time from the data storage device at the commencement of the download unless the time is within specification and the interrogation log automatically records the time of interrogation*

*11(2)(c) - the metering information, which represents the quantity of electricity conveyed at the point of connection, including the date and time stamp or index marker for each half hour period. This may be limited to the metering information accumulated since the last interrogation*

*11(2)(d) - the event log, which may be limited to the events information accumulated since the last interrogation*

*11(2)(e) - an interrogation log generated by the interrogation software to record details of all interrogations.*

*The interrogation log must be examined by the reconciliation participant responsible for collecting the data and appropriate action must be taken if problems are apparent or an automated software function flags exceptions.*

#### **Audit observation**

All HHR data interrogation is performed by an MEP.

#### **Audit commentary**

Not applicable

#### **Audit outcome**

Not applicable

### **6.14. HHR interrogation log requirements (Clause 11(3) Schedule 15.2)**

#### **Code reference**

*Clause 11(3) Schedule 15.2*

#### **Code related audit information**

*The interrogation log forms part of the interrogation audit trail and, as a minimum, must contain the following information:*

*11(3)(a)- the date of interrogation*

*11(3)(b)- the time of commencement of interrogation*

*11(3)(c)- the operator identification (if available)*

*11(3)(d)- the unique identifier of the meter or data storage device*

*11(3)(e)- the clock errors outside the range specified in Table 1 of clause 2*

*11(3)(f)- the method of interrogation*

*11(3)(g)- the identifier of the reading device used for interrogation (if applicable).*

#### **Audit observation**

All HHR data interrogation is performed by an MEP.

#### **Audit commentary**

Not applicable.

#### **Audit outcome**

Not applicable



## 7. STORING RAW METER DATA

### 7.1. Trading period duration (Clause 13 Schedule 15.2)

#### Code reference

*Clause 13 Schedule 15.2*

#### Code related audit information

*The trading period duration, normally 30 minutes, must be within  $\pm 0.1\%$  ( $\pm 2$  seconds).*

#### Audit observation

All HHR data interrogation is performed by an MEP.

#### Audit commentary

Not applicable.

#### Audit outcome

Not applicable

### 7.2. Archiving and storage of raw meter data (Clause 18 Schedule 15.2)

#### Code reference

*Clause 18 Schedule 15.2*

#### Code related audit information

*A reconciliation participant who is responsible for interrogating a metering installation must archive all raw meter data and any changes to the raw meter data for at least 48 months, in accordance with clause 8(6) of Schedule 10.6.*

*Procedures must be in place to ensure that raw meter data cannot be accessed by unauthorised personnel.*

*Meter readings cannot be modified without an audit trail being created.*

#### Audit observation

Meter data is stored in a data base on a computer which is password protected.

Policy is in place that NHH raw meter data is stored separately and only copies are ever used for processing - therefore it cannot be modified without an audit trail being created.

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 7.3. Non metering information collected / archived (Clause 21(5) Schedule 15.2)

#### Code reference

*Clause 21(5) Schedule 15.2*

#### Code related audit information

*All relevant non-metering information, such as external control equipment operation logs, used in the determination of profile data must be collected, and archived in accordance with clause 18.*

**Audit observation**

The participant does not rely on any non metering information to calculate submission information.

**Audit commentary**

Not applicable.

**Audit outcome**

Not applicable

## 8. CREATING AND MANAGING (INCLUDING VALIDATING, ESTIMATING, STORING, CORRECTING AND ARCHIVING) VOLUME INFORMATION

### 8.1. Correction of NHH meter readings (Clause 19(1) Schedule 15.2)

#### Code reference

*Clause 19(1) Schedule 15.2*

#### Code related audit information

*If errors are detected during validation of non-half hour meter readings, one of the following must be undertaken:*

*19(1)(a) - confirmation of the original meter reading by carrying out another meter reading*

*19(1)(b) - replacement of the original meter reading by another meter reading (even if the replacement meter reading may be at a different date)*

*19(1)(c) - if the original meter reading cannot be confirmed or replaced by a meter reading from another interrogation, then an estimated reading is substituted and the estimated reading is marked as an estimate and it is subsequently replaced in accordance with clause 4(2).*

#### Audit observation

We asked the participant if any errors had occurred and looked for errors ourselves during the audit.

#### Audit commentary

No errors have been identified by the participant and none were discovered during the audit.

#### Audit outcome

Compliant

### 8.2. Correction of HHR metering information (Clause 19(2) Schedule 15.2)

#### Code reference

*Clause 19(2) Schedule 15.2*

#### Code related audit information

*If errors are detected during validation of half hour metering information the correction must be as follows:*

*19(2)(a) - if a check meter or data storage device is installed at the metering installation, data from this source may be substituted*

*19(2)(b) - in the absence of any check meter or data storage device, data may be substituted from another period if the total of all substituted intervals matches the total consumption recorded on the meter, if available, and the pattern of consumption is considered materially similar to the period in error.*

#### Audit observation

We asked the participant if any errors had occurred and looked for errors ourselves during the audit.

#### Audit commentary

No errors have been identified by the participant and none were discovered during the audit.

#### Audit outcome

Compliant

### 8.3. Error and loss compensation arrangements (Clause 19(3) Schedule 15.2)

#### Code reference

Clause 19(3) Schedule 15.2

#### Code related audit information

*If error compensation and loss compensation are carried out as part of the process of determining accurate data, the compensation process must be documented and must comply with audit trail requirements.*

#### Audit observation

The participant does not have any error and loss compensation arrangements.

#### Audit commentary

The participant does not have any error and loss compensation arrangements.

#### Audit outcome

Not applicable

### 8.4. Correction of HHR and NHH raw meter data (Clause 22(1) and (2) Schedule 15.2)

#### Code reference

Clause 22(1) and (2) Schedule 15.2

#### Code related audit information

*In correcting a meter reading in accordance with clause 19, the raw meter data must not be overwritten. If the raw meter data and the meter readings are the same, an automatic secure backup of the affected data must be made and archived by the processing or data correction application.*

*If data is corrected or altered, a journal must be generated and archived with the raw meter data file. The journal must contain the following:*

*22(2)(a) - the date of the correction or alteration*

*22(2)(b) - the time of the correction or alteration*

*22(2)(c) - the operator identifier of the reconciliation participant*

*22(2)(d) - the half-hour metering data or the non half hour metering data corrected or altered, and the total difference in volume of such corrected or altered data*

*22(2)(e) - the technique used to arrive at the corrected data*

*22(2)(f) - the reason for the correction or alteration.*

#### Audit observation

The participant has not corrected any HHR or NHH raw meter data.

#### Audit commentary

The participant has not corrected any HHR or NHH raw meter data.

#### Audit outcome

Not applicable

## 9. ESTIMATING AND VALIDATING VOLUME INFORMATION

### 9.1. Identification of readings (Clause 3(3) Schedule 15.2)

#### Code reference

*Clause 3(3) Schedule 15.2*

#### Code related audit information

*All estimated readings and permanent estimates must be clearly identified as an estimate at source and in any exchange of metering data or volume information between participants.*

#### Audit observation

I have observed the audit logs for volume calculation and confirm all metering information is identified as read or estimate.

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 9.2. Derivation of volume information (Clause 3(4) Schedule 15.2)

#### Code reference

*Clause 3(4) Schedule 15.2*

#### Code related audit information

*Volume information must be directly derived, in accordance with Schedule 15.2, from:*

*3(4)(a) - validated meter readings*

*3(4)(b) - estimated readings*

*3(4)(c) - permanent estimates.*

#### Audit observation

I have observed the audit logs for the calculation of volume information which indicate the source of information used

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 9.3. Meter data used to derive volume information (Clause 3(5) Schedule 15.2)

#### Code reference

*Clause 3(5) Schedule 15.2*

#### Code related audit information

*All meter data that is used to derive volume information must not be rounded or truncated from the stored data from the metering installation.*

#### **Audit observation**

I have observed the source meter data and the processing audit log.

#### **Audit commentary**

No rounding or truncation is performed.

#### **Audit outcome**

Compliant

### **9.4. Half hour estimates (Clause 15 Schedule 15.2)**

#### **Code reference**

*Clause 15 Schedule 15.2*

#### **Code related audit information**

*If a reconciliation participant is unable to interrogate an electronically interrogated metering installation before the deadline for providing submission information, the submission to the reconciliation manager must be the reconciliation participant's best estimate of the quantity of electricity that was purchased or sold in each trading period during any applicable consumption period for that metering installation.*

*The reconciliation participant must use reasonable endeavours to ensure that estimated submission information is within the percentage specified by the Authority.*

#### **Audit observation**

We have examined the process for calculating estimated volumes where HHR metering information has not been supplied in time for submissions.

#### **Audit commentary**

The calculation of estimated volumes is appropriate.

#### **Audit outcome**

Compliant

### **9.5. NHH metering information data validation (Clause 16 Schedule 15.2)**

#### **Code reference**

*Clause 16 Schedule 15.2*

#### **Code related audit information**

*Each validity check of non half hour meter readings and estimated readings must include the following:*

*16(2)(a) - confirmation that the meter reading or estimated reading relates to the correct ICP, meter, and register*

*16(2)(b) - checks for invalid dates and times*

*16(2)(c) - confirmation that the meter reading or estimated reading lies within an acceptable range compared with the expected pattern, previous pattern, or trend*

*16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected 0 values.*

#### **Audit observation**

I have examined the validation process for HHR metering information.

#### Audit commentary

I have observed appropriate validation checks in place and confirm compliance.

#### Audit outcome

Compliant

### 9.6. Electronic meter readings and estimated readings (Clause 17 Schedule 15.2)

#### Code reference

Clause 17 Schedule 15.2

#### Code related audit information

*Each validity check of electronically interrogated meter readings and estimate readings must be at a frequency that will allow a further interrogation of the data storage device before the data is overwritten within the data storage device and before this data can be used for any purpose under the Code.*

*Each validity check of a meter reading obtained by electronic interrogation or an estimated reading must include:*

*17(4)(a) - checks for missing data*

*17(4)(b) - checks for invalid dates and times*

*17(4)(c) - checks of unexpected 0 values*

*17(4)(d) - comparison with expected or previous flow patterns*

*17(4)(e) - comparisons of meter readings with data on any data storage device registers that are available*

*17(4)(f) - a review of meter and data storage device event list. Any event that could have affected the integrity of metering data must be investigated.*

#### Audit observation

The adequacy of read frequency is managed by the MEP. I have examined the validation process used by the participant.

#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

## 10. PROVISION OF METERING INFORMATION TO THE PRICING MANAGER IN ACCORDANCE WITH SUBPART 4 OF PART 13 (CLAUSE 15.38(1)(F))

The participant has no obligations under this part of the audit. All sub sections are therefore not applicable.

### 10.1. Generators to provide HHR metering information (Clause 13.136)

#### Code reference

Clause 13.136

#### Code related audit information

*The generator (and/or embedded generator) must provide to the pricing manager and the grid owner connected to the local network in which the embedded generator is located, half hour metering information in accordance with clause 13.138 in relation to generating plant that is subject to a dispatch instruction:*

- *that injects electricity directly into a local network; or*
- *if the meter configuration is such that the electricity flows into a local network without first passing through a grid injection point or grid exit point metering installation.*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

### 10.2. Unoffered & intermittent generation provision of metering information (Clause 13.137)

#### Code reference

Clause 13.137

#### Code related audit information

*Each generator must provide the pricing manager and the relevant grid owner half-hour metering information for:*

- *any unoffered generation from a generating station with a point of connection to the grid 13.137(1)(a)*
- *any electricity supplied from an intermittent generating station with a point of connection to the grid. 13.137(1)(b)*

*The generator must provide the pricing manager and the relevant grid owner with the half-hour metering information required under this clause in accordance with the requirements of Part 15 for the collection of that generator's volume information. (clause 13.137(2))*

*If such half-hour metering information is not available, the generator must provide the pricing manager and the relevant grid owner a reasonable estimate of such data. (clause 13.137(3))*

#### Audit observation

#### Audit commentary



#### Audit outcome

Not applicable

### 10.3. Loss adjustment of HHR metering information (Clause 13.138)

#### Code reference

*Clause 13.138*

#### Code related audit information

*The generator must provide the information required by clauses 13.136 and 13.137,*

*13.138(1)(a)- adjusted for losses (if any) relative to the grid injection point or, for embedded generators the grid exit point, at which it offered the electricity*

*13.138(1)(b)- in the manner and form that the pricing manager stipulates*

*13.138(1)(c)- by 0500 hours on a trading day for each trading period of the previous trading day.*

*The generator must provide the half-hour metering information required under this clause in accordance with the requirements of Part 15 for the collection of the generator's volume information.*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

### 10.4. Notification of the provision of HHR metering information (Clause 13.140)

#### Code reference

*Clause 13.140*

#### Code related audit information

*If the generator provides half-hourly metering information to the pricing manager or a grid owner under clauses 13.136 to 13.138, or 13.138A, it must also, by 0500 hours of that day, advise the relevant grid owner.*

#### Audit observation

#### Audit commentary

#### Audit outcome

Not applicable

## 11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

### 11.1. Buying and selling notifications (Clause 15.3)

#### Code reference

Clause 15.3

#### Code related audit information

*Unless an embedded generator has given a notification in respect of the point of connection under clause 15.3, a trader must give notice to the reconciliation manager if it is to commence or cease trading electricity at a point of connection using a profile with a profile code other than HHR, RPS, UML, EG1, or PV1 at least five business days before commencing or ceasing trader.*

*The notification must comply with any procedures or requirements specified by the reconciliation manager.*

#### Audit observation

The participant only trades with the standard profiles.

#### Audit commentary

Clause is not applicable

#### Audit outcome

Not applicable

### 11.2. Calculation of ICP days (Clause 15.6)

#### Code reference

Clause 15.6

#### Code related audit information

*Each retailer and direct purchaser (excluding direct consumers) must deliver a report to the reconciliation manager detailing the number of ICP days for each NSP for each submission file of submission information in respect of:*

*15.6(1)(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period*

*15.6(1)(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

*The ICP days information must be calculated using the data contained in the retailer or direct purchaser's reconciliation system when it aggregates volume information for ICPs into submission information.*

#### Audit observation

I have examined a sample of 5 ICP\_MISDS reports from the RM.

#### Audit commentary

In 4 of the reports there were 0 missing ICPs, in 1 report there was 1 missing ICP. The ICP was investigated and it was switched in very late in the consumption period being reconciled, this was simply a matter of timing of registry files. The process for calculating ICP days is robust.

#### Audit outcome

Compliant

### 11.3. Electricity supplied information provision to the reconciliation manager (Clause 15.7)

#### Code reference

Clause 15.7

#### Code related audit information

*A retailer must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each NSP, aggregated by invoice month, for which it has provided submission information to the reconciliation manager, including revised submission information for that period as non-loss adjusted values in respect of:*

*15.7(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period*

*15.7(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

#### Audit observation

The participant invoices monthly as of the first of the month which is synchronous with the reconciliation cycle. The participants billing system is integral with the reconciliation system.

#### Audit commentary

I have confirmed the electricity supplied report has been provided and correctly represents the electricity supplied for the reconciliation period it relates to

#### Audit outcome

Compliant

### 11.4. HHR aggregates information provision to the reconciliation manager (Clause 15.8)

#### Code reference

Clause 15.8

#### Code related audit information

*A retailer or direct purchaser (excluding direct consumers) must deliver to the reconciliation manager its total monthly quantity of electricity supplied for each half hourly metered ICP for which it has provided submission information to the reconciliation manager, including:*

*15.8(a) - submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period*

*15.8(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.*

#### Audit observation

I have compared the HHR aggregates file with the HHR submission file and examined the ICPMISS report.

#### Audit commentary

The HHR aggregate and HHR submission quantities are materially equal, however the Reconciliation Manager reports (ICPMISS report) one ICP missing from the aggregate report.

On examining the registry record of the ICP identified I found the participant had attempted to switch the ICP, however the switch was not successful and the ICP had remained with the other retailer.

#### Audit outcome

Compliant

## 12. SUBMISSION COMPUTATION

### 12.1. Daylight saving adjustment (Clause 15.36)

#### Code reference

Clause 15.36

#### Code related audit information

*The reconciliation participant must provide submission information to the reconciliation manager that is adjusted for NZDT using 1 of the techniques set out in clause 15.36(3) specified by the Authority.*

#### Audit observation

All HHR data received is DST adjusted at source.

#### Audit commentary

Not applicable

#### Audit outcome

Not applicable

### 12.2. Creation of submission information (Clause 15.4)

#### Code reference

Clause 15.4

#### Code related audit information

*By 1600 hours on the 4th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all NSPs for which the reconciliation participant is recorded in the registry as having traded electricity during the consumption period immediately before that reconciliation period (in accordance with Schedule 15.3).*

*By 1600 hours on the 13th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all points of connection for which the reconciliation participant is recorded in the registry as having traded electricity during any consumption period being reconciled in accordance with clauses 15.27 and 15.28, and in respect of which it has obtained revised submission information (in accordance with Schedule 15.3).*

#### Audit observation

There have been two instances where the Reconciliation Manager has alleged non compliance for late delivery of submission files. On 19 April 2018 day 13 files were provided 4 minutes late and on 4 May 2018 day 4 files were provided 26 minutes late.

In both instances a fact finding letter was sent and the participant responded.

#### Audit commentary

Both these incidents arose from unusual circumstances and neither are systemic process failures. The first arose due to confusion over trading contracts and the second from a system failure to import some relevant files.

I have worked with IDPL to understand these issues and why they arose. I am confident that robust solutions are now in place and they will not reoccur.

A relevant allegation of non compliance is raised here, the status of the alleged non compliance is cleared.

#### Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 12.2 With: <i>Clause 15.4</i> From: 05-Sep-17 To: 25-Jun-18	Late delivery of submission information. Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1	
Audit risk rating	Rationale for audit risk rating	
<b>Low</b>	Participant has corrected the reason for the late submission and has since demonstrated on time provision of submission information.	
Actions taken to resolve the issue		Completion date
The issue relating to failure to import some files has been solved and automated. Also reports are produced to show that the files import correctly which are checked. The issue relating to trading contracts is managed currently by a greater level of time being allowed for submission file preparation and submission. Also we have had some training in doing the trading contracts.		6/6/2018
Preventative actions taken to ensure no further issues will occur		Completion date
Our system uses automation to solve most issues, however we also will prepare our submission files at least 1 day in advance where this is possible. The relevant automation is completed.		6/6/2018
		Cleared

### 12.3. Allocation of submission information (Clause 15.5)

#### Code reference

Clause 15.5

#### Code related audit information

*In preparing and submitting submission information, the reconciliation participant must allocate volume information for each ICP to the NSP indicated by the data held in the registry for the relevant consumption period at the time the reconciliation participant assembles the submission information. Volume information must be derived in accordance with Schedule 15.2.*

*However, if, in relation to a point of connection at which the reconciliation participant trades electricity, a notification given by an embedded generator under clause 15.13 for an embedded generating station is in force, the reconciliation participant is not required to comply with the above in relation to electricity generated by the embedded generating station.*

#### **Audit observation**

I have examined the registry record and the participants reconciliation calculation logs.

#### **Audit commentary**

ICPs are correctly allocated to NSP at the time of submission. Compliance is confirmed.

#### **Audit outcome**

Compliant

### **12.4. Grid owner volumes information (Clause 15.9)**

#### **Code reference**

*Clause 15.9*

#### **Code related audit information**

*The participant (if a grid owner) must deliver to the reconciliation manager for each point of connection for all of its GXPs, the following:*

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.9(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.9(b))*

#### **Audit observation**

Not applicable

#### **Audit commentary**

Not applicable

#### **Audit outcome**

Not applicable

### **12.5. Provision of NSP submission information (Clause 15.10)**

#### **Code reference**

*Clause 15.10*

#### **Code related audit information**

*The participant (if a local or embedded network owner) must provide to the reconciliation manager for each NSP for which the participant has given a notification under clause 25(1) Schedule 11.1 (which relates to the creation, decommissioning, and transfer of NSPs) the following:*

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.10(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.10(b))*

#### **Audit observation**

Participant is not an NSP owner

#### **Audit commentary**

Participant is not an NSP owner

#### **Audit outcome**

Not applicable

### **12.6. Grid connected generation (Clause 15.11)**

#### **Code reference**

*Clause 15.11*

#### **Code related audit information**

*The participant (if a grid connected generator) must deliver to the reconciliation manager for each of its points of connection, the following:*

- *submission information for the immediately preceding consumption period, by 1600 hours on the 4th business day of each reconciliation period (clause 15.11(a))*
- *revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period. (clause 15.11(b))*

#### **Audit observation**

#### **Audit commentary**

The participant does not have any grid connected generation.

#### **Audit outcome**

Not applicable

### **12.7. Accuracy of submission information (Clause 15.12)**

#### **Code reference**

*Clause 15.12*

#### **Code related audit information**

*If the reconciliation participant has submitted information and then subsequently obtained more accurate information, the participant must provide the most accurate information available to the reconciliation manager or participant, as the case may be, at the next available opportunity for submission (in accordance with clauses 15.20A, 15.27, and 15.28).*

#### **Audit observation**

I have examined the participants received data and reconciliation processing logs. Revisions are being processed and subsequently received data is replacing previous estimates. I note that the participant has not yet been trading for 15 months and that some estimates are being used in the latest revisions.



#### Audit commentary

Compliance is confirmed.

#### Audit outcome

Compliant

### 12.8. Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2)

#### Code reference

Clause 4 Schedule 15.2

#### Code related audit information

*Only volume information created using validated meter readings, or if such values are unavailable, permanent estimates, has permanence within the reconciliation processes (unless subsequently found to be in error).*

*Volume information created using estimated readings must be subsequently replaced at the earliest opportunity by the reconciliation participant by volume information that has been created using validated meter readings or permanent estimates by, at the latest, the month 14 revision cycle.*

*A permanent estimate may be used in place of a validated meter reading, but only if, despite having used reasonable endeavours; the reconciliation participant has been unable to obtain a validated meter reading.*

#### Audit observation

Participant has not been operating for 15 months yet.

#### Audit commentary

Participant has not been operating for 15 months yet.

#### Audit outcome

Not applicable

### 12.9. Reconciliation participants to prepare information (Clause 2 Schedule 15.3)

#### Code reference

Clause 2 Schedule 15.3

#### Code related audit information

*If a reconciliation participant prepares submission information for each NSP for the relevant consumption periods in accordance with the Code, such submission information must comprise the following:*

- *half hour volume information for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a))*
- *for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(b)):*
  - a) *half hour volume information for the ICP; or*
  - b) *non half hour volumes information calculated under clauses 4 to 6 (as applicable).*
  - c) *unmetered load quantities for each ICP that has unmetered load associated with it derived from the quantity recorded in the registry against the relevant ICP and the number of days in*

- the period, the distributed unmetered load database, or other sources of relevant information. (clause 2(1)(c))*
- *to create non half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):*
    - a) *the certification of the control device is recorded in the registry; or*
    - b) *the metering installation in which the control device is location has interim certification.*
  - *to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3)):*
    - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
    - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report. (clause 2(3)(b))*

#### **Audit observation**

I have examined the registry record, the participants meter read and metering information data, and the participants processing logs.

#### **Audit commentary**

The correct submission information is being produced for the ICPs traded.

#### **Audit outcome**

Compliant

### **12.10. Historical estimates and forward estimates (Clause 3 Schedule 15.3)**

#### **Code reference**

*Clause 3 Schedule 15.3*

#### **Code related audit information**

*For each ICP that has a non-half hour metering installation, volume information derived from validated meter readings, estimated readings, or permanent estimates must be allocated to consumption periods using the following techniques to create historical estimates and forward estimates. (clause 3(1))*

*Each estimate that is a forward estimate or a historical estimate must clearly be identified as such. (clause 3(2))*

*If validated meter readings are not available for the purpose of clauses 4 and 5, permanent estimates may be used in place of validated meter readings. (clause 3(3))*

#### **Audit observation**

I have examined examples of the calculation of NHH submission information.

#### **Audit commentary**

The participant correctly calculates NHH volumes from meter readings. Where available the seasonal adjustment profile is used and correctly applied. When the SAS file is not available a flat allocation is used to days between meter readings.

#### **Audit outcome**

Compliant

### **12.11. Historical estimate process (Clause 4 and 5 Schedule 15.3)**

#### **Code reference**

#### Clause 4 and 5 Schedule 15.3

##### Code related audit information

*The methodology outlined in clause 4 of Schedule 15.3 must be used when preparing historic estimates of volume information for each ICP when the relevant seasonal adjustment shape is available.*

*If a seasonal adjustment shape is not available, the methodology for preparing an historical estimate of volume information for each ICP must be the same as in clause 4, except that the relevant quantities  $kWh_{px}$  must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by  $kWh_{px}$ .*

##### Audit observation

I have examined two examples of the calculation of HE for the first part of April 2018 on bd 13 when the SAS file was available.

##### Audit commentary

In both cases the values I calculated differed from the values calculated and presented in the processing audit trail. On review the SAS file was not available for this calculation and the system correctly allocated consumption equally to the days between meter reads.

Further examples were examined where the SAS file was available and the system correctly allocated consumption according to the seasonal shape.

##### Audit outcome

Compliant

#### 12.12. Forward estimate process (Clause 6 Schedule 15.3)

##### Code reference

*Clause 6 Schedule 15.3*

##### Code related audit information

*Forward estimates may be used only in respect of any period for which an historical estimate cannot be calculated.*

*The methodology used for calculating a forward estimate may be determined by the reconciliation participant, only if it ensures that the accuracy is within the percentage of error specified by the Authority.*

##### Audit observation

I compared submitted volumes for Jan 2018 over 3 revisions

##### Audit commentary

I found the difference to be within 4% which is well within the 15% threshold published by the Authority.

##### Audit outcome

Compliant

#### 12.13. Compulsory meter reading after profile change (Clause 7 Schedule 15.3)

##### Code reference

Clause 7 Schedule 15.3

**Code related audit information**

*If the reconciliation participant changes the profile associated with a meter, it must, when determining the volume information for that meter and its respective ICP, use a validated meter reading or permanent estimate on the day on which the profile change is to take effect.*

*The reconciliation participant must use the volume information from that validated meter reading or permanent estimate in calculating the relevant historical estimates of each profile for that meter.*

**Audit observation**

I have examined 10 instances of changed profile, and in each instance a meter reading was taken on the day of change.

**Audit commentary**

Compliance is demonstrated.

**Audit outcome**

Compliant

## 13. SUBMISSION FORMAT AND TIMING

### 13.1. Provision of submission information to the RM (Clause 8 Schedule 15.3)

#### Code reference

*Clause 8 Schedule 15.3*

#### Code related audit information

*Submission information provided to the reconciliation manager must be aggregated to the following level:*

- *NSP code (clause 8(a))*
- *reconciliation type (clause 8(b))*
- *profile (clause 8(c))*
- *loss category code (clause 8(d))*
- *flow direction (clause 8(e))*
- *dedicated NSP (clause 8(f))*
- *trading period for half hour metered ICPs and consumption period or day for all other ICPs. (clause 8(g))*

#### Audit observation

I have examined submission files provided to the reconciliation manager.

#### Audit commentary

All submission files have been correctly formatted.

#### Audit outcome

Compliant

### 13.2. Reporting resolution (Clause 9 Schedule 15.3)

#### Code reference

*Clause 9 Schedule 15.3*

#### Code related audit information

*When reporting submission information, the number of decimal places must be rounded to not more than 2 decimal places.*

*If the unrounded digit to the right of the second decimal place is greater than or equal to 5, the second digit is rounded up, and*

*If the digit to the right of the second decimal place is less than 5, the second digit is unchanged.*

#### Audit observation

I have examined submission information provided.

#### Audit commentary

All submission data is rounded as required.

#### Audit outcome

Compliant

### 13.3. Historical estimate reporting to RM (Clause 10 Schedule 15.3)

## Code reference

*Clause 10 Schedule 15.3*

## Code related audit information

*By 1600 hours on the 13th business day of each reconciliation period the reconciliation participant must report to the reconciliation manager the proportion of historical estimates per NSP contained within its non half hour submission information.*

*The proportion of submission information per NSP that is comprised of historical estimates must (unless exceptional circumstances exist) be:*

- *at least 80% for revised data provided at the month 3 revision (clause 10(3)(a))*
- *at least 90% for revised data provided at the month 7 revision (clause 10(3)(b))*
- *100% for revised data provided at the month 14 revision. (clause 10(3)(c))*

## Audit observation

The participant has not traded long enough for R 14 submissions to be present, I have checked R3 submissions where available.

## Audit commentary

The R3 submissions checked had in excess of 80% HE present.

## Audit outcome

Compliant

## CONCLUSION

We have identified 3 minor instances of alleged non compliance in this audit report, the total breach risk rating is 3. Applying the audit frequency guideline, the next audit would be due in 24 months.

IDPL are more aware than most participants of their responsibilities under the Code and have made every effort to fulfill these. The 3 minor allegations of non compliance arose because of unusual circumstances, and the participant has both learned from these incidents and in each case put in place controls to prevent further occurrence.

Our recommendation is the next audit date should be in 24 months.

## PARTICIPANT RESPONSE

ID Power recognises that these alleged non compliances occurred and we continue to learn and do our best to achieve full compliance to the code for all our operations.

## APPENDIX A - TEMPLATE FOR NON-COMPLIANCE, ISSUES AND RECOMMENDATIONS.

### NON-COMPLIANCE

Non-compliance	Description	
Audit Ref: With: From: Click here to enter a date. To: Click here to enter a date.	Potential impact: Choose an item. Actual impact: Choose an item. Audit history: Controls: Choose an item. Breach risk rating:	
Audit risk rating	Rationale for audit risk rating	
Choose an item.		
Actions taken to resolve the issue	Completion date	Remedial action status
		Choose an item.
Preventative actions taken to ensure no further issues will occur	Completion date	

### RECOMMENDATION

Description	Recommendation	Audited party comment	Remedial action

### ISSUE

Description	Issue	Remedial action