

**ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT**

For

Pulse Energy Alliance LP



Prepared by: Steve Woods

Date audit commenced: 30 November 2017

Date audit report completed: 15 December 2017

Audit report due date: 15-Dec-17

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EXECUTIVE SUMMARY

Pulse Energy Alliance LP (Pulse) owns the Property Power (CPPL) retail business. It was intended that the ICPs would be switched to Pulse prior to the CPPL audit date; however this has been delayed which means Pulse needs a material change audit conducted to include the CPPL operation. This audit was therefore performed at the request of Pulse so that it can be supplied to the Electricity Authority to satisfy the requirements of Clause 8(1).

The audit has examined past performance to evaluate likely future performance.

16 non compliances are recorded. Most are minor and only affect a small number of ICPs. Additional controls are required to ensure ongoing compliance of the registry update and validation processes. I recommend the next audit date for Pulse remains the same.

The matters identified are shown in the tables below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Metering arrangements	2.12	10.36	There are no arrangements in place with Nova, AccuCal and Contact Energy. Each of these MEPS supplies metering to one CPPL ICP.	Moderate	Low	2	Investigating
Registry updates to active	3.3	11.7(2)	8 late registry updates to active.	Weak	Low	3	Identified
Registry updates to active	3.5	9 Schedule 11.1	Registry not populated within 5 business days for two newly electrically connected ICPs	Weak	Low	3	Identified
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	One incorrect ANZSIC code.	Moderate	Low	2	Identified
Changes to unmetered load	3.7	9(1)(f) of Schedule 11.1	Inaccurate unmetered load figure for one ICP.	Weak	Low	3	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Management of active status	3.8	17 Schedule 11.1	Incorrect status for two new connections and eight reconnections.	Moderate	Low	2	Identified
Management of inactive status	3.9	19 Schedule 11.1	Incorrect status for two new connections.	Moderate	Low	2	Identified
Inform registry of switch request	4.1	2 Schedule 11.3	Late NT file for one ICP.	Moderate	Low	2	Identified
Losing trader provides final information – transfer switch	4.3	5 Schedule 11.3	Incorrect daily consumption figure for ICP 0001436762UN57B.	Moderate	Low	2	Identified
Losing trader provides final information – switch move	4.10	12 Schedule 11.3	CS file content inaccurate for 3 ICPs. 1 late CS file for move in switch.	Moderate	Low	2	Identified
Read change for switch move	4.11	12 Schedule 11.3	1 late AC file for switch move.	Strong	Low	1	Identified
Customer readings	6.6	3(2) of schedule 15.2	Customer readings not validated against another “set” of actual readings.	Strong	Low	1	Cleared
Readings during period of supply	6.8	7(1) and (2) Schedule 15.2	One ICP not read during the period of supply.	Strong	Low	1	Cleared
HHR aggregates	11.4	Clause 15.8	HHR aggregates file does not contain electricity supplied information.	Strong	Low	1	Unknown
Creation of submissions	12.2	15.2, 15.4 and 15.12 of part 15	One incorrect AV080 file for March 2017.	Strong	Low	1	Cleared

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Meter read frequency reporting	13.1	8 & 9 of Schedule 15.2	Five meter reading frequency reports submitted late.	Strong	Low	1	Identified
Future Risk Rating						29	

Future risk rating	0	1-3	4-14	16-40	41-55	55+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	Recommendation	Description
		Nil	

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

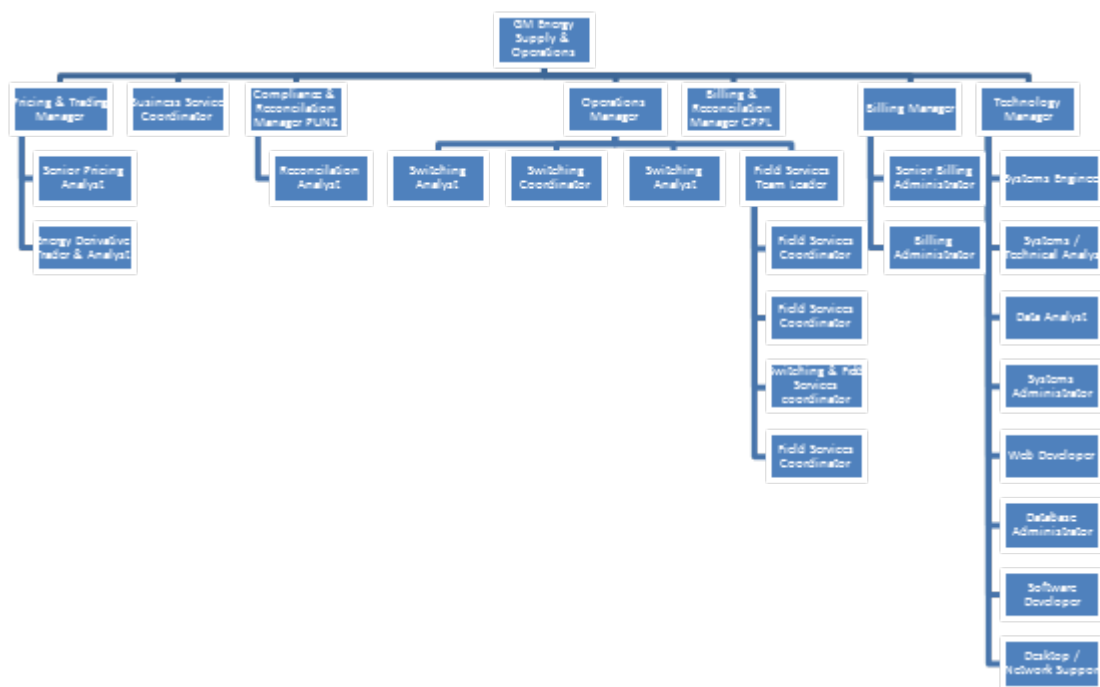
Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

There are no exemptions in place that are relevant to the scope of this audit.

1.2. Structure of Organisation

Pulse provided their current organisational structure:



1.3. Persons involved in this audit

Auditor:

Steve Woods

Veritek Limited

Electricity Authority Approved Auditor

Pulse personnel assisting in this audit were:

Name	Title
Malcolm Souness	Reconciliation & Compliance Manager
Mike Kew	Billing and Reconciliation Manager – Property Power

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 contractors fulfillment of the participants 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

Use of agents was discussed with CPPL.

Audit commentary

CPPL uses the following agents:

- Wells as an agent for NHH data collection.
- AMS and EDMI as HHR agents.
- John Candy Consulting (JCC) for the creation of NHH submission and ICP days files.

1.5. Hardware and Software

CPPL uses:

- Agility's Orion system for switching, registry management, billing, and as billed reporting
- JCC's RM Tool for all HHR consumption and ICP days reporting.

JCC prepares NHH consumption and ICP days reporting on behalf of CPPL.

1.6. Breaches or Breach Allegations

CPPL reported that there were no breach allegations during the audit period.

1.7. ICP Data

CPPL provided a list file as at November 2017 by status:

Status	Number of ICPs (Nov 2017)	Number of ICPs (Feb 2017)	Number of ICPs (2016)
Active (2,0)	1,225	1,180	320
Inactive - new connection in progress (1,12)	2	0	0
Inactive - vacant (1,4)	6	9	0
Inactive - AMI remote disconnection (1,7)	1	0	0
Inactive - de-energised due to meter disconnected (1,8)	0	0	0
Inactive - at pole fuse (1,9)	0	0	0
Inactive - de-energised at meter box switch (1,10)	0	0	0
Inactive - at meter box switch (1,11)	0	0	0
Inactive - ready for decommissioning (1,6)	0	1	0
Decommissioned (3)	1	0	0

The active ICPs from the list file are summarised by meter category in the table below:

Metering Category	Number of ICPs (Nov 2017)	Number of ICPs (Feb 2017)	Number of ICPs (2016)
1	1,175	1,134	286
2	43	39	29
3	2	2	1
4	1	1	1
5	0	0	0
9	2	2	1
Blank	2	2	2

1.8. Authorisation Received

CPPL provided all information required directly.

1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of CPPL, to support their application for renewal of certification in accordance with clauses 5 and 7 of schedule 15.1.

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits V7.1.

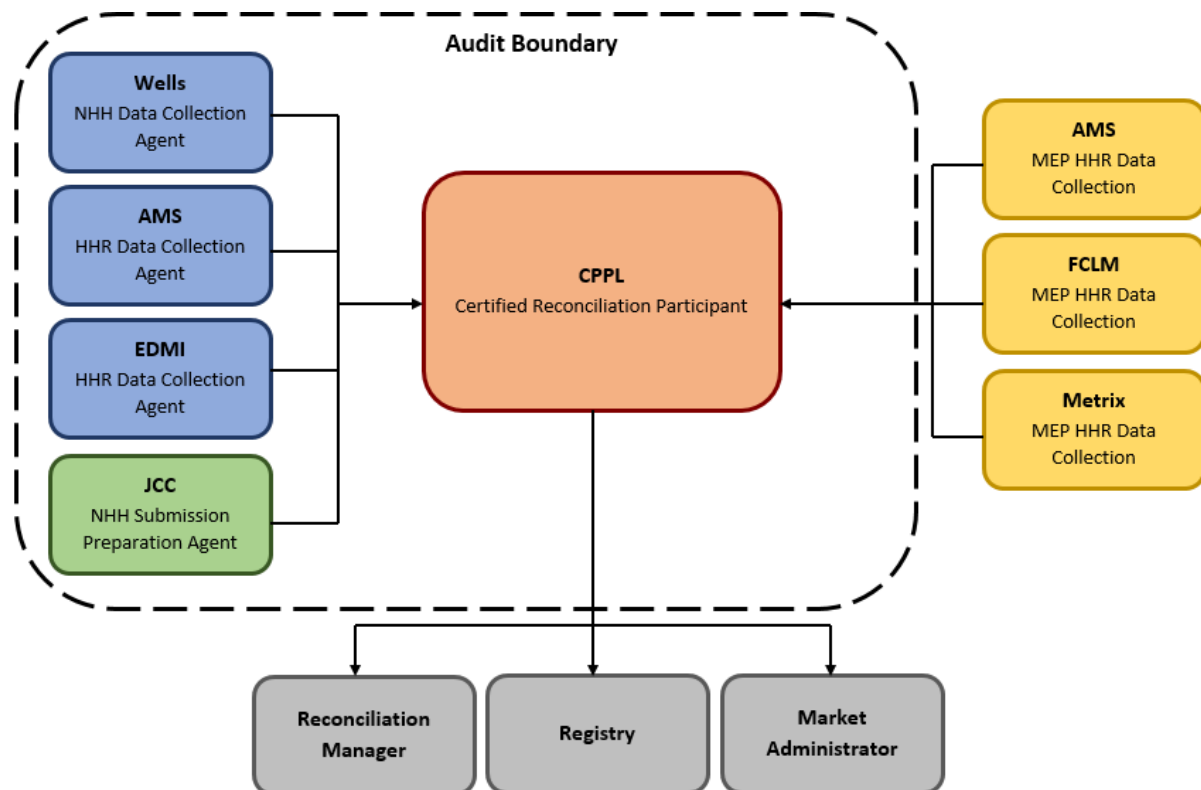
The audit was carried out at CPPL's premises in Auckland on November 30th 2017.

CPPL reconciles HHR and NHH.

Since April 2016, NHH ICP days and NHH consumption submissions have been prepared by JCC using information provided by CPPL. Prior to April 2016 NHH submissions were prepared with assistance from TEG and Associates, and prior to that by CPPL using Orion.

CPPL continues to prepare its own HHR ICP days, HHR volumes, HHR aggregates using the JCC RM Tool. CPPL prepares as billed reports, registry updates and switching activity using Orion.

The scope of the audit is shown in the diagram below, with the CPPL audit boundary shown for clarity. Parties acting as agents are included within the audit boundary.



The table below shows the tasks under clause 15.38 of part 15 for which CPPL require certification.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents providing services	MEPs providing services
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) – Gathering and storing raw meter data	Wells – NHH data collection AMS – HHR data collection EDMI – HHR data collection	AMS – HHR data collection FCLM – HHR data collection Metrix – HHR data collection
(c)(iii) - Creation and management of HHR and NHH volume information	JCC (NHH only)	
(d) – Calculation of ICP days	JCC (NHH only)	
(da) - delivery of electricity supplied information under clause 15.7		
(db) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8		
(e) – Provision of submission information for reconciliation		

1.10. Summary of previous audit

CPPL provided a copy of their previous audit conducted in February 2017 by Tara Gannon of Veritek Limited. The summary tables below show that 20 of the 23 issues raised still exist.

Further comment is made in the relevant sections of this report.

Table of Non-Compliance

Subject	Section	Clause	Non compliance	Status
Response to transfer switch request	4.2	Clause 3 of Schedule 11.3	An incorrect AN response code was provided for 30 transfer switches. AA was used, when AD applied.	Cleared
Final information for transfer switch	4.3	Clause 5 of Schedule 11.3	Four CS files were provided more than five business days after the event date.	Cleared
Final information for transfer switch	4.3	Clause 5 of Schedule 11.3	Some CS file information was inaccurate.	Still existing
Traders must use the same reading for a transfer switch	4.4	Clause 6 of Schedule 11.3	Incorrect reads applied for one ICP where a RR was rejected.	Cleared
Response to move in switch request	4.8	Clause 10 of Schedule 11.3	An incorrect AN response code was provided for two move in switches. AA was used, when AD applied.	Cleared
Final information for move in switch	4.10	Clause 10 of Schedule 11.3	Nine CS files were provided more than five business days after receipt of the NT file.	Still existing for 1 file
Final information for move in switch	4.10	Clause 11 of Schedule 11.3	Some CS file information was inaccurate.	Still existing

Subject	Section	Clause	Non compliance	Status
Traders must use the same reading for a move in switch	4.11	Clause 6 of Schedule 11.3	One late RR acknowledgement file.	Still existing for 1 late AC file
Withdrawal of switch requests	4.15	Clause 18 of Schedule 11.3	One late AW file.	Cleared
Trader updates	3.3	Clause 10 of Schedule 11.1	The registry was not updated within five business days of the event for 130 trader updates, and 25 status updates.	Still existing
Arrangements for metering	2.12	Clause 10.36	There are no arrangements in place with Nova, AccuCal and Contact Energy. Each of these MEPS supplies metering to one CPPL ICP.	Still existing
Registry discrepancies	2.1	Clause 11 of Schedule 11.1	Four ICPs have profiles inconsistent with their submission type.	Cleared
ANZSIC codes	3.6	Clause 9 (1)(k) of Schedule 11.1	Four ICPs have an ANZSIC code of T994 or T994000 (don't know).	One ICP with T994 now corrected
MEP event detail reports	9.5	Clause 17 of Schedule 15.2	Metering event detail reports are not reviewed to identify events that could affect the integrity of metering data.	Cleared
Trader notifications	11.1	Clause 15.3 of Part 15	Two trader notifications were not provided to the Reconciliation Manager.	Cleared
Creation of submission information	12.2	Clause 15.12 of Part 15	<p>An incorrect read was applied where an RR file was rejected.</p> <p>There was inconsistency between TOU related fields for two ICPs, which resulted in omission from reconciliation reports for one ICP, and historic estimate not being reported when reads were available for another. These issues will be corrected in wash up submissions.</p>	Cleared

Subject	Section	Clause	Non compliance	Status
Profile changes	12.13	Clause 7 of Schedule 15.3	Where a profile changes to RPS, an actual read is not usually recorded on the day of the profile change.	Cleared
Meter read frequency reports	13.1	Clause 8(1)(a) and 9(1)(a) of Schedule 15.2	Some meter reading frequency reports have been provided more than 20 business days after the end of the month.	Still existing
Metering information	9.5	5 (b) & (c) of Schedule 15.2	Checks for phase failure and broken or missing seals not conducted and recorded by Wells	Cleared

Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Status
Provision of complete and accurate information	2.2	Clause 15.2(1) of Part 15	Implement more rigorous monitoring to identify any potential discrepancies with submission files.	Additional checks in place now
Registry discrepancies	2.1	Clause 11 of Schedule 11.1	Expand LIS file checks to ensure that TOU/non TOU data is consistent across all affected fields on the registry and in Orion.	This validation is in place
Unmetered load calculation	3.7	Clause 9(1)(f) of Schedule 11.1	Work with Vector to confirm the correct unmetered load details for ICP 0968442897LC7E6, then update the daily unmetered kWh and trader unmetered load details in the registry and Orion.	Still existing
Interrogate meters once	6.8	Clauses 7 (1) & (2) of Schedule 15.2	Develop reporting to identify ICPs not read during the period of supply.	Reporting is in place
Correction of NHH meter readings	8.1	Clauses 19(1) of Schedule 15.2	Advise JCC where previously sent reads have become misreads, so he can ensure they are not used for reconciliation.	Cleared
Identification of readings	6.6	Clause 3(2) Schedule 15.2	Review controls to ensure customer reads are not entered as actuals unless they meet the criteria set out in clause 3(2) of Schedule 15.2.	Cleared

Subject	Section	Clause	Recommendation for improvement	Status
Electricity supplied	11.3	Clause 15.7 of Part 15	Monitor as billed versus submission volumes over the coming months. Investigate to confirm the reason for the variance between billed and submitted volumes.	Cleared
Forward estimate process	12.2	Clause 6 of Schedule 15.3	Differences between original and revision submissions should be reviewed, to determine if they are caused by errors and if any action needs to be taken.	Cleared

Table of Issues

Subject	Section	Clause	EDMI Issue
HHR Interrogation Data Requirement	6.13	11(2)(e) of schedule 15.2	No event logs included for manually read meters being provided by the Retailers agent to EDMl.
Data Storage Device Clock Synchronization	7.4	5(2) of schedule 15.2	No clock synchronisation occurring for manually read meters by the Retailers agent.

Subject	Section	Clause	EA Issue
Final information for move in switch	4.10	Clause 11 of Schedule 11.3	Losing trader must send a CS within five business days of the NT receipt, but the gaining trader can request up to 10 business days in advance. This will cause the losing trader to be non-compliant.
Monitoring of switching timeframes using the switch breach report	4.10	Clause 10 of Schedule 11.3	The registry switch breach report allows up to 10 business days from receipt of the NT to provide a CS, but CS files should be provided within five business days. Participants' reliance on the accuracy of the switch breach report to confirm acceptable switching timeframes can result in non-compliance. The switch breach report should be reviewed and updated to ensure that it is accurate for all switch types.

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 to any person under Part 15 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

The process to find and correct incorrect information was examined. The registry validation process was examined in detail in relation to the achievement of this requirement. The list file was examined to identify any registry discrepancies, and confirm that all information was correct and not misleading.

Audit commentary

Twice monthly, CPPL runs a date ranged registry list from August 2015 (when they began trading) through to the current date. The registry list is compared to CPPL's own date ranged records. The first check is completed prior to initial allocation submissions, the second prior to wash up submissions. The report is used to identify discrepancies between CPPL's system and the Registry. The checks focus on statuses, start and end dates, and submission types.

No discrepancies were identified during the audit.

The RM tool used for the management of HHR data imports a registry list file (with history) to ensure the aggregation factors are correct.

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

Processes to provide information were reviewed and observed throughout the audit.

Audit commentary

This area is discussed in several sections in this report and compliance is confirmed.

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

I reviewed the method to receive meter reading information.

Audit commentary

All data received from agents and MEPs, and transferred to agents, is transmitted 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*
- *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

A complete audit trail was checked for all data gathering, validation and processing functions.

Audit commentary

The audit trail requirements were checked and I confirm appropriate audit trails are available.

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

I reviewed CPPL's current standard terms and conditions.

Audit commentary

CPPL's terms and conditions include arrangements for meter access and shutdowns, and these clauses are mirrored in agreements with MEPS.

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

I reviewed CPPL's current standard terms and conditions.

Audit commentary

CPPL's terms and conditions include arrangements for meter access, and these clauses are mirrored in agreements with MEPS.

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

CPPL was requested to provide details of any installations with loss compensation.

Audit commentary

There are no current examples where loss compensation is required.

Audit outcome

Not applicable

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 sub-clause (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

I reviewed CPPL's current standard residential and standard business terms and conditions.

Audit commentary

CPPL's current terms and conditions with their customers include assignment by the Electricity Authority in the event of retailer default.

Audit outcome

Compliant

2.9. Electrical connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

- accept responsibility for the ICP and the obligations under Parts 10 and 11, and, under Part 15; and
- have an arrangement with an MEP to provide metering at the point of connection under Part 15.

Audit observation

Two new connections have started during the audit period. Both were checked from end to end.

Audit commentary

ICP 1001303689LCD4D is still at 1,2 but has certified metering installed on the registry. ICP 1002039514LC6E1 is still at 1,12 and does not have metering installed on the registry.

Both ICPs are electrically connected and should be at the Active status. This is discussed further in **Section 3.5**. Compliance is achieved with this clause because CPPL accepts responsibility and has an arrangement in place for metering.

Audit outcome

Compliant

2.10. Metering certification (Clause 10.33(2))

Code reference

Clause 10.33(2)

Code related audit information

A reconciliation participant may energise or authorise the energisation of a connection only if the reconciliation participant has accepted responsibility for the point of connection if one or more certified metering installations are in place.

Audit observation

The new connection process was examined in detail to evaluate the strength of controls. The list file, and event detail report for the period from 1/08/2017 to 15/11/2017 were analysed to confirm process compliance and controls are functioning as expected.

Audit commentary

Two ICPs were electrically connected during the audit period and both have certified metering installations.

Audit outcome

Compliant

2.11. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

Before notifying the registry of 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 notifying the registry of 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

The process to ensure an arrangement is in place before trading commences on a network was examined.

Audit commentary

CPPL demonstrated the existence of either a Use of Systems Agreement or other trading arrangement for all networks it trades on.

Audit outcome

Compliant

2.12. 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

The process to ensure an arrangement is in place with the metering equipment provider before an ICP can be created or switched in was checked by confirming contracts or arrangements are in place.

Audit commentary

There are no arrangements in place with Nova, AccuCal and Contact Energy. Each of these MEPs supplies metering to one CPPL ICP.

Audit outcome

Compliant

Non-compliance	Description	
Audit Ref: 2.12 With: Clause 10.36 From: 01-Apr-18 To: 11-Dec-17	There are no arrangements in place with Nova, AccuCal and Contact Energy. Each of these MEPs supplies metering to one CPPL ICP. Potential impact: Low Actual impact: None Audit history: Once Controls: Moderate Breach risk rating: 2	
Audit risk rating	Rationale for audit risk rating	
Low	The controls are recorded as moderate because there is room for improvement. There is no impact resulting from this non-compliance, however there is a minor future risk; therefore the audit risk rating is low.	
Actions taken to resolve the issue		Completion date
We know that MEPs maintain a relationship with EDMI, which provides our data (and bills us). CPPL is a part of Pulse and Pulse has contractual relationships with Nova and Contact Energy and most other MEPs (excluding AccuCal). CPPL will ensure that its participant obligations are covered by Pulse's arrangements.		01/02/18
Preventative actions taken to ensure no further issues will occur		Completion date
MEPs will be checked on future switches		01/02/18
		Investigating

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

The new connections process was examined in detail to confirm compliance with the requirement to obtain ICP identifiers for points of connection to local or embedded networks.

Audit commentary

This requirement is well understood and managed by CPPL. The process is detailed in **section 2.9**.

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 about each ICP at which it trades electricity in accordance with Schedule 11.1.

Audit observation

The new connection process was examined in detail in **section 2.9**. Timeliness of new connections is discussed in **section 3.5**.

The process to change registry information is discussed in **section 3.3**.

Audit commentary

The new connection process was examined in detail in **section 2.9**. Timeliness of new connections is discussed in **section 3.5**.

The process to change registry information is discussed in **section 3.3**.

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 about an ICP changes, the trader must notify the registry of the change no later than five business days after the change.

Audit observation

The list file and event detail report for the period from 1/08/2017 to 15/11/2017 were analysed determine the overall performance for that period.

Audit commentary

The event detail report contained eight status changes to Active. All were over five business days and were corrections made after switches out (two) or after switches in (six). There was one status change to 1,12 which was within five business days.

The validation process only occurs at the end of the month during the submission process therefore there are likely to be delays with most updates.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.3 With: Clause 11.7(2) From: 05-Sep-17 To: 15-Nov-17	8 late registry updates to active. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Weak Breach risk rating: 3
Audit risk rating	Rationale for audit risk rating

Low	<p>Controls are rated as weak because they do not mitigate risk most of the time.</p> <p>There is a minor impact on invoicing for some ICPs and on other traders if ICPs switch out with the incorrect status; therefore, the audit risk rating is low.</p> <p>Updates to active are processed, and flow through to the reconciliation systems so that they can be incorporated into revision submissions.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
We have checked 'status' using the LIS file for all current ICPs.		15/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We will generate LIS files weekly, and run a check for ICPs with non-active status. Anomalies will be investigated and, if necessary, updated at that time.		01/02/2018	

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)):*
 - o *arrange for a final interrogation to take place prior to or upon meter removal (clause 11.18(3)(a)); and*
 - o *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

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection process was examined for two ICPs.

ICP Decommissioning

The process for the decommissioning of ICPs was examined for one ICP.

Audit commentary

The processes were compliant for all three ICPs with regard to trader responsibility.

Audit outcome

Compliant

3.5. Provision of information to the registry (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 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 market administrator (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 five 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

Two new connections have started during the audit period. Both were checked from end to end.

Audit commentary

ICP 1001303689LCD4D is still at 1,2 but has certified metering installed on the registry. ICP 1002039514LC6E1 is still at 1,12, is not entered into Orion and does not have metering installed on the registry.

Both ICPs are electrically connected and should be at the Active status.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Of Schedule 11.1 From: 08-Sep-17 To: 04-Dec-17	Registry not populated within 5 business days for two newly electrically connected ICPs. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as weak because they did not identify these two ICPs. Settlement has not occurred for these two ICPs, therefore the impact is considered minor leading to a low audit risk rating.		
Actions taken to resolve the issue		Completion date	Remedial action status
ICPs have been updated, and will be included in forthcoming washups		01/12/2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Any further instances will be flagged by the new check described under section 3.3		01/02/2018	

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

The process to capture and manage ANZSIC codes was examined. A Registry List was reviewed to check ANZSIC codes.

Audit commentary

The list file was analysed and I found ICP 1001263576LC7B3 had T994 (don't know) as the ANZSIC code. A check of Orion showed the ANZSIC code was known and it is now updated.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.6 With: Clause 9 (1(k) of Schedule 11.1 From: 08-Sep-17 To: 04-Dec-17	One incorrect ANZSIC code. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate because compliance is achieved most of the time. There is a minor impact on reporting conducted by the Authority, therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The offending ANZSIC code has been updated		21/11/17	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
ANZSIC codes will be checked monthly in the LIS file, after washup submissions		01/02/2018	

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 CPPL list file contained four ICPs with unmetered load. These were all checked for accuracy.

Audit commentary

The daily unmetered kWh published on the registry was checked and found to be correct for three of the ICPs. For ICP 0968442897LC7E6 the network and trader unmetered load details were inconsistent, and both were inconsistent with the daily unmetered kWh. The daily unmetered kWh and trader unmetered load details had been inherited from the previous retailer. The unmetered connection is an automatic gate but the registry unmetered figure is 9.6 UPD which is too high and this is what submission is based on. The distributor information suggests 1.2 UPD and this is what is being billed by CPPL. Therefore, the registry is incorrect.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.7 With: Clause 9(1)(f) of Schedule 11.1 From: 01-Feb-17 To: 04-Dec-17	Inaccurate unmetered load figure for one ICP. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as weak because they did not identify this discrepancy. There is a minor impact on settlement and a potential impact on other participants if this ICP had switched out with the incorrect details.		
Actions taken to resolve the issue		Completion date	Remedial action status
Registry to be updated		14/12/2017	
Preventative actions taken to ensure no further issues will occur		Completion date	
For any new ICPs with UML, the trader and network details will be compared with the daily unmetered kWh figure. In the event of a discrepancy, the network will be asked to confirm their details, and trader details updated to match network.		01/02/2018	

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 managed by the relevant trader and indicates that:

- the associated electrical installations are energised (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 one 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)).

Audit observation

The new connection process was examined in detail as discussed in **sections 2.9 & 3.5**. The list file as at August 2017 was examined to identify any ICPs still at the status “Inactive - new connection in progress”

with an initial energisation date populated. The event detail report and list file report were checked for any variances between the initial electrical connection date and the active date, or meter certification date and active date. I checked all ICPs with a variance between the active date and the initial energisation date, or the active date and the meter certification date.

The process for the management of ICP reconnection was examined. The event detail report for the audit period was analysed and the findings in relation to the timeliness of updates to registry is recorded in **section 3.3**.

Audit commentary

There were two new connections during the audit period and neither have an initial electrical connection date populated, therefore I was unable to use this information as a comparison. Neither of the new connections were at the Active status despite both being electrically connected.

As mentioned in **section 3.3**, the process to identify incorrect Active statuses only occurs at the end of the month, therefore ICPs can have the incorrect status for up to one month before correction.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 3.8 With: Clause 17 of Schedule 11.1 From: 01-Feb-17 To: 04-Dec-17	Incorrect status for two new connections and eight reconnections. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2	
Audit risk rating	Rationale for audit risk rating	
Low	I have rated the controls as moderate because they achieve compliance most of the time. There is a minor impact on settlement and a potential impact on other participants when ICPs switch out with the incorrect status.	
Actions taken to resolve the issue		Completion date
Status of new connections updated		27/11/2017
Preventative actions taken to ensure no further issues will occur		Completion date
ICPs with Inactive status will be flagged by the review process described under section 3.3.		01/02/2017
		Identified

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

The process to manage ICPs at the inactive status was examined. The findings in relation to the timeliness of updates to registry is recorded in **section 3.3**.

Audit commentary

Two ICPs are recorded as inactive, new connection in progress but they are both electrically connected, meaning they are at the incorrect status.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 3.9 With: Clause 17 of Schedule 11.1 From: 01-Feb-17 To: 04-Dec-17	Incorrect status for two new connections. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2	
Audit risk rating	Rationale for audit risk rating	
Low	I have rated the controls as moderate because they achieve compliance most of the time. There is a minor impact on settlement and a potential impact on other participants when ICPs switch out with the incorrect status.	
Actions taken to resolve the issue		Completion date
Past changes have been updated		1/12/17
Preventative actions taken to ensure no further issues will occur		Completion date
ICPs with Inactive status will be flagged by the review process described under section 3.3.		01/02/2018
		Remedial action status
		Identified

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

Whilst this is a Distributor's code obligation, I investigated whether any queries had been received from Distributors in relation to ICPs at the "New" or "Ready" status for more than 24 months and what process is in place to manage and respond to such requests.

Audit commentary

Any requests received from Distributors are actioned. No recent requests were available for review.

ICPs at new and ready status are not actively monitored. I did not identify any ICPs at new or ready status for more than 24 months.

Audit outcome

Compliant

3.11. Change of MEP (Clause 10.22(1)(a)(i))

Code reference

Clause 10.22(1)(a)(i)

Code related audit information

If the MEP for an ICP which is not also an NSP changes, the trader must notify the registry of the gaining MEP in accordance with Part 11.

Audit observation

The registry event detail file showed no MEP changes on existing ICPs during the period examined.

Audit commentary

The registry event detail file showed no MEP changes on existing ICPs during the period examined.

All ICPs have a valid MEP.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

Switching activities are automated and the status of each “switch” is monitored through the use of the Registry “breach report”.

The switching process is compliant with the requirements of Section 36M of the Fair Trading Act 1986. The switch proceeds once the agreement is signed and a switch withdrawal is sent if the customer cancels the agreement within the five business day “cooling off” period.

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 of a switch no later than two business days after the arrangement comes into effect and include in its advice to the registry that the switch type is TR and one or more profile codes associated with that ICP.

Audit observation

The switch gain process was examined to determine when CPPL deem all conditions to be met. A sample of four ICPs using the typical sampling methodology were checked to confirm that these were notified to the registry within two business days.

Audit commentary

CPPL’s processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are sent as soon as all pre-conditions are met and the withdrawal process is used if the customer changes their mind. The NT file was sent within two business days for three of the four ICPs checked. The NT file was not sent within two business days for ICP 0001444809UN2A9 and was sent once the customer re-contacted CPPL.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: Clause 2 Schedule 11.3 From: 09-Aug-17 To: 01-Sep-17	Late NT file for one ICP. Potential impact: Medium Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because there is room for improvement. The impact on the consumer was minor; therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
NT was sent within 1 day after second customer contact			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Better procedures and staff training are required to ensure that tasks are both generated and assigned correctly within appropriate timeframes. In this case there was perceived to be an ambiguity about whether the customer should be signed up immediately, or more information required, and this was not resolved. This was a training/procedural issue.		01/03/2018	

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 three business days after receipt of notification of a switch from the registry, 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 five 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 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 two calendar months (clause 4(2) of Schedule 11.3).

Audit observation

An event detail report for the audit period was reviewed, to identify AN files issued by CPPL during the audit period. A sample of three ANs per response code were reviewed to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

The event detail report for the period from 1/08/2017 to 15/11/2017 was analysed to assess compliance with the setting of event dates requirement.

Audit commentary

All event dates were set within five business days.

The AN response codes of AA, AD and OC were all correctly used.

There were no late AN files.

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 in accordance with clause 3(a) of Schedule 11.3 with the required information, no later than five business days after the event date, the losing trader must complete the switch by:

- *providing event date to the registry (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 on 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

An event detail report for the period from 1/08/2017 to 15/11/2017 was reviewed, to identify CS files issued by CPPL. The accuracy of the content of CS files was confirmed by checking a sample of two records. The content checked included:

- correct identification of meter readings and correct date of last meter reading
- accuracy of meter readings
- accuracy of average daily consumption (this is based on the most recent read to read consumption).

The process to manage the sending of the CS file within five business days of the event date was examined. The switch breach history report for the audit period was reviewed to identify late CS files.

Audit commentary

The switch breach report did not record any late files.

ICP 0001436762UN57B had zero in the daily kWh field when there was actual consumption. It appears that when HHR billing occurs the NHH daily kWh field is not populated in Orion and therefore is not included in the switch file.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.3 With: Clause 5 of Schedule 11.3 From: 09-Nov-17 To: 09-Nov-17	Incorrect daily consumption figure for ICP 0001436762UN57B. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate because they achieve compliance most of the time. There is a minor impact on other participants, therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
There is no mechanism for correcting the daily kWh field after a switch has been completed, therefore no resolution has been attempted of this instance. Since the site is AMI enabled, the gaining retailer should have no need to use daily kWh for estimation.		n/a	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Outgoing CS files are already reviewed to ensure closing reads are correctly recorded. This check will be expanded to review estimated daily consumption.		01/02/2018	

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 four calendar months of the actual event date, provide to the losing trader a changed switch event meter reading supported by two validated meter readings.

- *the losing trader can choose not to accept the reading, however must advise the gaining trader no later than five 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

The process for the management of read requests was examined.

The event detail report for the period from 1/08/2017 to 15/11/2017 was reviewed to identify all read change requests and acknowledgements.

The switch breach history report for the audit period was reviewed, and no late read change requests were identified for transfer switches. No late acknowledgements were recorded. One RR file was checked.

Audit commentary

The process and content of the RR file is confirmed as compliant.

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 on 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 five business days after receiving final information from the registry, 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

The process for the management of read requests was examined. The event detail report and switch breach report were analysed.

Audit commentary

The switch breach report did not record any late files for gaining trader read changes.

This clause requires that if the gaining trader provides an AMI read within five days of the switch event date to the losing trader and if the losing trader traded it as a non-half hour site, the losing trader must use this read so long as the losing trader has not already provided an actual read from an AMI site.

There were no rejected RR files.

Audit outcome

Compliant

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 notify the other that it disputes a switch event meter reading, notified under clauses 1 to 6. Such a dispute must be resolved in accordance with clause 15.29 (with all necessary amendments).

Audit observation

I confirmed with CPPL whether any disputes have needed to be resolved in accordance with this clause.

Audit commentary

CPPL confirmed that no disputes have needed to be resolved in accordance with this clause.

Audit outcome

Compliant

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 of a switch and the proposed event date no later than two business days after the arrangement comes into effect.

In its advice to the registry 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 switch gain process was examined to determine when CPPL deem all conditions to be met. A sample of four ICPs using the typical sampling methodology were checked to confirm that these were notified to the registry within two business days.

Audit commentary

CPPL's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are sent as soon as all pre-conditions are met and the withdrawal process is used if the customer changes their mind. The ICPs checked were sent within two days of all conditions being met.

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 five business days after receipt of notification of the switch move from the registry, 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:

- *confirmation of the switch event date; and*
- *a valid switch response code; and*
- *final information as required under clause 1; 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. Determine an event date that is not earlier than the gaining traders proposed date and that date can be no later than 10 business days after the date of the notification. Alternatively, the losing trader may provide a request for a withdrawal of the switch in accordance with clause 17.*

Audit observation

An event detail report for the period from 01/01/2017 to 31/07/2017 was reviewed to identify AN files issued by CPPL during the audit period. A sample of two ANs per response code were reviewed to determine whether the codes had been correctly applied.

The switch breach history report for the audit period was reviewed in relation to both late AN and CS files.

The process to manage the sending of the CS file within five business days of the event date was examined.

Audit commentary

The switching process was examined in relation to CPPL as the "losing trader" for a selection of NHH ICPs, in most instances the proposed event date is the date the customer moved into the premise, and this date is confirmed.

The switch breach report was examined and found no late AN files.

All AN file reason codes were confirmed as correct.

Audit outcome

Compliant

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

Code reference

Clause 10(2) Schedule 11.3 (2)

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 as described in sub-clause (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

The setting of event dates for move switches was examined. The event detail report for 01/01/2017 to 31/07/2017 was examined, comparing the NT requested event date with the AN event date sent by CPPL for any switches dated earlier than the NT requested date for the 74 switch moves recorded. The report was also checked for any event dates that were set greater than ten days from the NT receipt date.

Audit commentary

Analysis found compliance for all event dates.

Audit outcome

Compliant

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

If the losing trader has provided information to the registry in accordance with clause 10(a), within three business days after the later of the actual event date or date of receipt of the switch request, the losing trader must:

- *provide the event date (clause 11(a)); and*
- *provide the switch event meter reading as at the event date for each meter or data storage device noted on the registry (clause 11(b)); and*
- *if switch event meter reading is not a validated meter reading, provide the date of the last reading of the meter or storage device (clause (11(c)).*

Audit observation

An event detail report for 01/01/2017 to 31/07/2017 was examined was reviewed to identify CS files issued by CPPL during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of five records. The content checked included:

- correct identification of meter readings and correct date of last meter reading
- accuracy of meter readings
- accuracy of average daily consumption (this is based on the most recent read to read consumption).

Audit commentary

The accuracy of the content of CS files was confirmed by checking a sample of five move in CS files. The sample checked found one ICP with an actual reading labelled as an estimate, one ICP with zero in the daily kWh field which should have shown consumption and one file contained an estimate even though an actual was available.

The switch breach report recorded one late CS file sent late during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.10 With: Clause 11 Schedule 11.3 From: 01-Feb-17 To: 04-Dec-17	CS file content inaccurate for 3 ICPs. 1 late CS file for move in switch. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate because they mitigate risk most of the time. Late and incorrect CS files have a minor impact on other traders. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The identified errors have been investigated, and it has been determined there is no impact on settlement or other traders. Where another retailer was involved (incorrect closing read provided), we advised them by email and requested they send an RR (which they did).		1/12/17	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Outgoing CS files are already reviewed manually; new checks will be added to this review. This is a procedural/training issue.		01/02/2017	

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 notify 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 two validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):*
- *notify 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 on 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 five business days after receiving final information from the registry, 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 process for the management of read requests was examined.

An event detail report for 01/08/2017 to 15/11/2017 was analysed to identify all read change requests and acknowledgements during the audit period.

I checked for any rejected RR files and I checked the content of RR files.

The switch breach history report for the audit period was reviewed, and one late AC file was identified.

Audit commentary

RR requests are generally initiated via email between the two parties and only once an agreement has been reached an RR file is sent to complete. All RR requests are evaluated and validated against the ICP information. If the request is within validation requirements these are accepted.

The switch breach report recorded one late AC files. The process and content of files is compliant. There were no rejected RR files.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.11 With: Clause 12 Schedule 11.3 From: 19-Oct-17 To: 27-Nov-17	1 late AC file for switch move. Potential impact: Low Actual impact: Low Audit history: multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong as they are sufficient to mitigate risk most of the time. CPPL generally sends RR files as soon as practicable after identifying that a change is required.		
Actions taken to resolve the issue		Completion date	Remedial action status
The late AC file was caused by registry rejection of a submitted file, which was not immediately noticed. The file was corrected and re-sent when the issue was spotted		Oct 2017	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Training and procedures have been updated to ensure that rejected registry files are checked daily		Oct 2017	

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

Code reference

Clause 14 Schedule 11.3

Code related audit information

The gaining trader 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 to trade electricity through or assume responsibility for:

- *a half hour metering installation that is not a category 1 or 2 metering installation, that has an ICP with a submission type half hour on the registry and an AMI flag of "N"; or*
- *a half hour metering installation that has a submission flag of half hour 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 with the losing trader trades 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 of the switch and expected event date no later than three business days after the arrangement comes into effect.

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

- 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, 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, if:

14(4)(a) – the proposed event date is in the same month as the date on which the gaining trader advised the registry; 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 and this date is agreed between the losing and gaining traders.

Audit observation

There were no gaining trader switches initiated during the audit period.

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 three business days after the losing trader is informed about the switch by the registry, the losing trader must:

15(a) - provide to the registry 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 were no gaining trader switches initiated during the audit period.

Audit outcome

Not applicable

4.14. Gaining trader to notify registry - 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 three business days, after receiving the valid switch response code, by advising the registry of the event date.

If the ICP is being de-energised 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 de-energised or the metering equipment is removed; or

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

Audit observation

There were no gaining trader switches initiated during the audit period.

Audit outcome

Not applicable

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 two 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 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 a notification from the registry of a switch, the trader receiving the withdrawal must notify the registry 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 notification from the registry, 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 two business days after receipt of notification from the registry 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

There were no NW files sent. Nine NW files were received. The switch breach report was checked for file timeliness.

Audit commentary

All files were sent on time. 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 meter reading process in relation to meter reads for switching purposes was examined. Examples to confirm this procedure have been examined as part of the sending of final information for switches and read requests made.

Audit commentary

All meter readings used in the switching process are validated meter readings or permanent estimates. This process is discussed further in **section 4.3**.

CPPL's policy regarding the management of meter reading expenses is compliant.

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

The Electricity Registry switch save protected retailer list was examined to confirm that CPPL has been a save protected retailer since 13/01/2015.

Win-back processes were examined to determine whether they are compliant.

I checked the event detail report for all withdrawn switches from the audit period, to identify any withdrawn switches with a CX code applied prior to the switch completion date in relation to any switch save protected retailers.

Audit commentary

No win-back activity is initiated with lost customers during the switch. Contact is only made with departing customers to remind them that they must give adequate notice if they wish to terminate their contract, and discuss outstanding accounts if required. CPPL does attempt to win-back customers once the switch has completed.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

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 notify 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 notify 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 notify the registry 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 notify 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 notify the distributor of the change. The amount of electricity attributable to that ICP becomes UFE.

Audit observation

The registry list was reviewed and found CPPL has no ICPs with shared unmetered load.

Audit commentary

The registry list was reviewed and found CPPL has no ICPs with shared unmetered load.

Audit outcome

Compliant

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

Examination of the registry list file found four active ICPs have unmetered load recorded, excluding shared unmetered load. None of these ICPs have annual unmetered load that exceeds 3,000 kWh.

Audit commentary

All unmetered ICPs supplied by CPPL have annual consumption below the 3,000 kWh threshold.

Audit outcome

Compliant

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

Examination of the registry list file found four active ICPs have unmetered load recorded, excluding shared unmetered load. None of these ICPs have annual unmetered load that exceeds 3,000 kWh.

Audit commentary

All unmetered ICPs supplied by CPPL have annual consumption below the 3,000 kWh threshold

Audit outcome

Compliant

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

Examination of the registry list file confirmed that no DUML was supplied by CPPL.

Audit commentary

CPPL does not intend to deal with any distributed unmetered load ICPs.

Audit outcome

Not applicable

6. GATHERING RAW METER DATA

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 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 energised ICP that is not also an NSP, and for which it is recorded in the registry as being responsible, ensure that:

- *there is one 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

A registry list was examined to confirm whether CPPL had supplied any ICPs with generation during the audit period.

Audit commentary

Analysis of the registry list found that CPPL has not supplied any ICPs with generation connected.

Audit outcome

Not applicable

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 three months for the grid owner to review and comment on the design*
- *respond within three 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

The NSP table was reviewed which confirmed that CPPL is not responsible for any GIPs.

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 registry list was reviewed to confirm that CPPL has used the RPS, HHR and HHB profiles, therefore this clause does not apply.

Audit commentary

The registry list was reviewed to confirm that CPPL has used the RPS, HHR and HHB profiles, therefore this clause does not apply.

Audit outcome

Non-compliant

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

Processes relating to defective metering were examined. The process is compliant; however there were no specific examples to examine.

Audit commentary

Processes relating to defective metering were examined. The process is compliant; however there were no specific examples to examine.

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 on 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 agents' audit reports confirm compliance with this clause.

Audit commentary

The agents' audit reports confirm compliance with this clause.

Audit outcome

Compliant

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 data collection process was examined and the agent's audit report was checked.

Processes for customer reads were reviewed.

Audit commentary

For manually collected readings, the meter register value is collected and entered into a hand held device. This reading is entered Orion and is appropriately labelled to denote that it is a meter reading collected and validated by a meter reader. Validated meter readings are derived from meter readings.

AMI readings are sourced directly from raw meter data.

The Wells report confirms compliance with the requirement to:

- 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.*

Customer reads are validated before they are used for submission purposes, but the validation process only requires that one of the previous reads is an "actual" read. The Code requires validation against another "set" of meter readings, which implies more than one "actual" read.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.6 With: Clause 3(2) of schedule 15.2 From: 01-Apr-17 To: 11-Dec-17	Customer readings not validated against another “set” of actual readings. Potential impact: Low Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because CPPL has changed their process to ensure two actual reads are used for validation. There was no evidence of incorrect bills or submission information; therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Controls have been implemented to exclude customer reads from reconciliation, unless validated. Future washups will reflect this change.		01/12/2017	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Customer reads will not be sent to reconciliation unless validated against at least two non-customer reads		01/12/2017	

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 process of the application of meter readings was examined.

Audit commentary

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 as required by this clause. Compliance is confirmed.

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

The process to manage missed reads was examined.

Audit commentary

A validated meter reading must be 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, unless exceptional circumstances prevent this from occurring. This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

The NHH meter reading frequency guidelines published by the Electricity Authority define “Exceptional circumstances” as meaning “circumstances in which access to the relevant meter is not achieved despite the reconciliation participant's best endeavours”. “Best endeavours” is defined as:

“Where a reconciliation participant failed to interrogate an ICP as a result of access issues, the reconciliation participant had made a minimum of three attempts to contact the customer, by using at least two methods of communication”.

CPPL attempts to obtain reads for all ICPs. AMI meter readings are received promptly, and meters without AMI are added to Wells’ meter reading schedule soon after the ICP switches in.

One ICP was not read during the period of supply, which was approx. six weeks.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.8 With: Clause 7(1) and (2) Schedule 15.2 From: 06-Jun-17 To: 31-Jul-17	One ICP not read during the period of supply. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong because they mitigate risk most of the time. The impact on settlement is minor therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
At the time of the unread meter switch in, we had effectively (temporarily) lost the means to communicate with Wells (because of staff and infrastructure changes). This channel has since been restored, and QM procedures updated.		01/11/2017	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Triggers already exist to flag meters that have switched on an estimated read; these will be extended to flag instances where Wells needs to be notified.		01/02/2018	

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 meter reading process was examined. Monthly reports for the months of September 2017 and October 2017 were provided.

Audit commentary

All ICPs had a validated read within the last 12 months.

Audit outcome

Compliant

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 four months for 90% of the non half hour metered ICPs.

A report is to be sent to the market administrator 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

The meter reading process was examined. Monthly reports for the months of September 2017 and October 2017 were provided.

Audit commentary

The monthly meter reading reports provided were reviewed.

Compliance was achieved for both months checked.

Audit outcome

Compliant

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

Data collection processes were checked by evaluating the agent audit reports.

Audit commentary

Compliance is confirmed in the agent reports.

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

HHR data is collected by EDM I and AMS. I checked their audit reports to confirm compliance.

Audit commentary

The agent audit reports confirm compliance.

Audit outcome

Compliant

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

HHR data is collected by EDM I and AMS. I checked their audit reports to confirm compliance.

Audit commentary

The agent audit reports confirm compliance.

Audit outcome

Compliant

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

HHR data is collected by EDM I and AMS. I checked their audit reports to confirm compliance.

Audit commentary

The agent audit reports confirm compliance.

Audit outcome

Compliant

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 $\pm 0.1\%$ (± 2 seconds).

Audit observation

HHR data is collected by EDM I and AMS. I checked their audit reports to confirm compliance.

Audit commentary

The agent audit reports confirm compliance.

Audit outcome

Compliant

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

HHR data is collected by EDM I and AMS. I checked their audit reports to confirm compliance.

Audit commentary

The agent audit reports confirm compliance.

CPPL has archived all data since they began trading. Security is in place to ensure data is secure.

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

Processes to record non-metering information were discussed.

Audit commentary

No non metering information is collected by CPPL.

Audit outcome

Compliant

7.4. Data Storage Device Clock Synchronisation (Clause 2(5)&(6) of Schedule 15.2)**Code reference**

Clause 2(5)&(6) of Schedule 15.2

Code related audit information

When electronically interrogating the meter the participant must ensure that the clock is synchronised and correct the clock and raw data where necessary.

Audit observation

HHR data is collected by EDM I and AMS. I checked their audit reports to confirm compliance.

Audit commentary

The agent audit reports confirm compliance.

Audit outcome

Compliant

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

Processes for correction of NHH meter readings were reviewed for three ICPs.

Audit commentary

I reviewed three examples of corrections to determine whether they had been processed correctly, and flowed through to revision submissions. In all cases the correct process was used and revision files were accurate.

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

Processes for correction of HHR meter readings were reviewed. A sample of two HHR corrections were reviewed.

Audit commentary

CPPL uses a template (HHR Data Estimation Profile) to estimate consumption. The total volume of the missing period is calculated, and then profiling is applied based on a day of the week with similar profile where data is available. If only a part day is to be estimated, CPPL ensures that actual consumption is reported where it is available. All estimates or corrections are checked to ensure they are reasonable. The estimated data is then imported into the RM tool, and the audit trail shows that the data has been replaced. The process was demonstrated and checked for some two examples. Compliance is confirmed.

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

CPPL does not deal with any data where error or loss compensation occurs.

Audit commentary

CPPL does not deal with any data where error or loss compensation occurs.

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

Corrections are discussed in **sections 8.1** and **8.2**, which confirmed that raw meter data is not overwritten as part of the correction process. Audit trails are discussed in **section 2.4**.

Raw meter data retention was reviewed as part of MEP and agent audits.

Audit commentary

NHH raw meter data cannot be overwritten. This matter is discussed further in the Wells audit report.

CPPL may correct working data and they will keep an appropriate audit trail, which was viewed during the audit.

Audit outcome

Compliant

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 checked a sample of meter readings and estimates to confirm correct identification.

Audit commentary

All reads and estimates checked were correctly identified.

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

A sample of submission data was reviewed in **section 12**, to confirm that volume was based on readings as required.

Audit commentary

Review of submission data confirmed that it is based on readings as required by this clause.

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 for derive volume information must not be rounded or truncated from the stored data from the metering installation.

Audit observation

A sample of submission data was reviewed in **section 12**, to confirm that volume was based on readings as required.

I reviewed the method to receive meter reading information, and traced a sample of reads from the source files to CPPL's systems as discussed in **section 6.5**.

Audit commentary

The MEP or agent retains raw, unrounded data. Meter reading data is not rounded or truncated on import.

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

The HHR estimate process was examined by checking the JCC audit report and confirming the process had not changed.

Audit commentary

CPPL uses a template (HHR Data Estimation Profile) to estimate consumption. The total volume of the missing period is calculated, and then profiling is applied based on a day of the week with similar profile where data is available. If only a part day is to be estimated, CPPL ensures that actual consumption is reported where it is available. All estimates or corrections are checked to ensure they are reasonable. The estimated data is then imported into the RM tool, and the audit trail shows that the data has been replaced. The process was demonstrated and checked for some specific examples. Compliance is confirmed.

When metering is changed from NHH to HHR, or NHH to HHR, there are processes in place to ensure that all consumption is captured, but it may not be recorded against the correct date. I reviewed examples to confirm this. The NHH removed meter reading is deemed to apply at the end of the day, in

accordance with Clause 6 of Schedule 15.2, the HHR meter opening reading is applied from the start of the next day. All consumption will be captured, but the HHR consumption after the meter replacement time on the replacement date will be recorded against the following day. The Code does not appear to cater for this situation.

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 reviewed and observed the NHH data validation process.

Audit commentary

NHH meter reading validation occurs in Orion. The following checks are automatically conducted:

1. high consumption (10% above expected consumption)
2. low consumption (10% lower than expected consumption)
3. unknown site
4. unknown meter
5. duplicate read
6. incorrect date
7. closing read exists
8. read before the opening read
9. rollover reads.

Any exceptions are addressed and action is taken depending on the type of exception. Compliance is confirmed.

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 zero 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

I reviewed the HHR data validation process, including meter event logs and validation checks. Validation of electronic readings was reviewed as part of the MEP and agent audits.

Audit commentary

AMS and EDM I conduct some HHR validation on behalf of CPPL for the reads they collect.

The AMS validation process includes:

1. checks for missing data
2. checks for invalid dates and times (this is conducted through the clock synchronisation process)
3. checks of unexpected zero values (these settings are at ICP and some are set to allow for a certain number of zeros depending on the customer type)
4. minimum VA
5. maximum VA - set based on CT ratio
6. comparison with expected or previous flow patterns - these can be viewed graphically
7. comparisons with the readings reported by meter and data logger registers where these are available
8. a review of meter and data logger event list - any event that could have affected the integrity of metering is investigated
9. phase failure.

The EDM I validation process includes:

1. checks for missing data
2. checks for invalid dates and times (this is conducted through the clock synchronisation process)
3. checks of unexpected zero values (this will result in a failure of the minimum VA check)
4. minimum VA (this is configurable and is usually zero)

5. maximum VA - based on CT ratio, not metering category
6. comparison with expected or previous flow patterns (min and max VA settings will pick up initial issues then the data can be viewed graphically to further validate)
7. a review of meter and data logger event list - any event that could have affected the integrity of metering is investigated.

CPPL conduct additional checks using the RM Tool. The RM Tool completes a sum-check, and checks for missing days and missing trading periods, indicating that data is missing for complete days or for part days respectively. If the data cannot be obtained, estimation is conducted.

Within Orion there is a billing exception process, which identifies differences to historic consumption patterns which require checking. Some invoices are also individually reviewed prior to sending.

Metering event reports are provided by MEPs and these are reviewed as required by the Code.

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))

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

No information is provided to the pricing manager in accordance with this clause.

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

No information is provided to the pricing manager in accordance with this clause.

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

No information is provided to the pricing manager in accordance with this clause.

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

No information is provided to the pricing manager or grid owner in accordance with this clause.

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 notify 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

A registry list was reviewed for the audit period to confirm the profiles used. Processes to create buying and selling notifications were reviewed.

Audit commentary

CPPL only uses the HHR, RPS and HHB profiles. All trading notifications are in place.

Audit outcome

Compliant

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

The ICP days process was evaluated by checking the process plus the ICPMISS and ICPCOMP reports for a three month period.

Audit commentary

HHR ICP days are calculated in the RM tool. NHH ICP days are calculated by JCC based on registry list information. The same registry list information is used to validate the NHH submissions.

The ICPMISS and ICPCOMP reports did not identify any discrepancies considered worthy of examination.

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

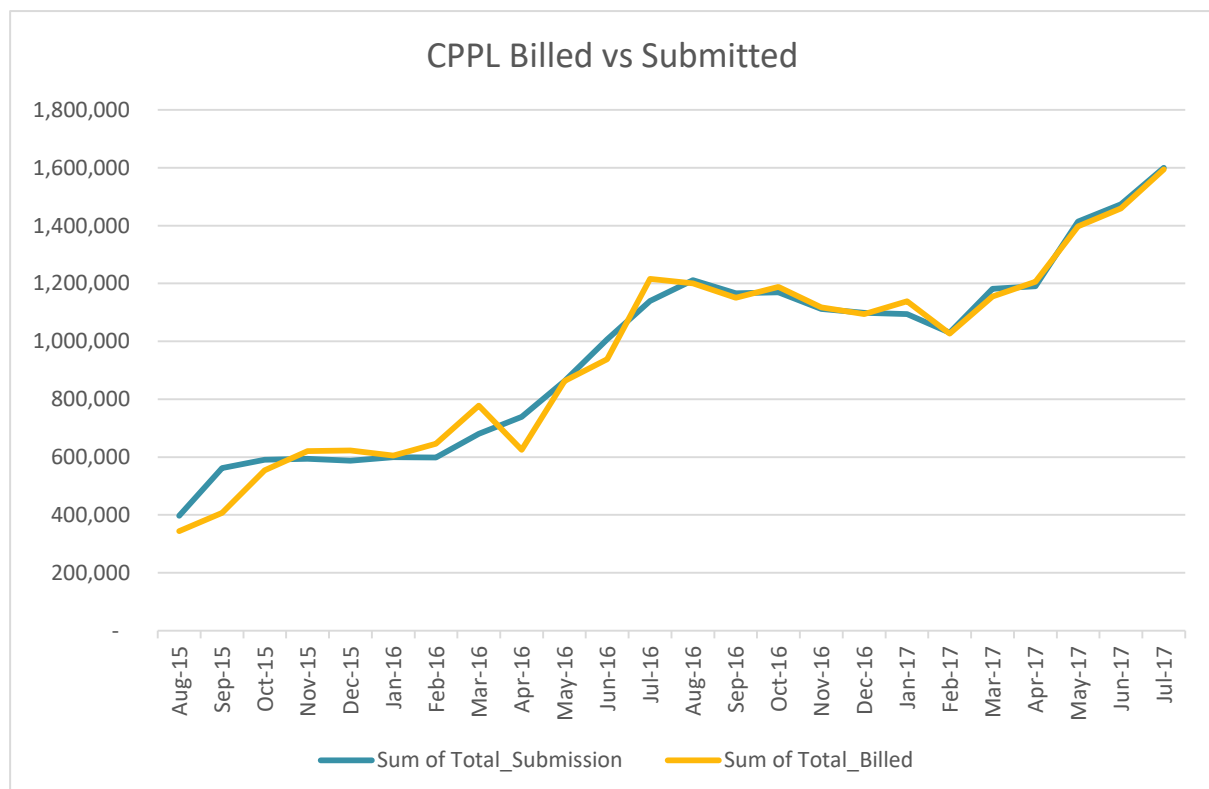
15.7(b) - revised submission information provided in accordance with clause 15.4(2), by 1600 hours on the 13th business day of each reconciliation period.

Audit observation

The process for the calculation of as billed volumes was examined by checking the GR130 reports for a two year period to confirm whether the relationship between billed and submitted data appears reasonable.

Audit commentary

The total difference is 0.7% for the two years ended July 2017 (billed lower than submission). In the last year the billed total appears to be much closer to the submitted total and with a difference of 0.7%, I don't believe this needs further investigation.



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 confirmed that the process for the calculation and aggregation of HHR data is correct, by matching HHR aggregates information with the HHR volumes data for September and October 2017.

The GR090 ICP Missing files were examined for the audit period.

Audit commentary

HHR aggregates and volumes information was consistent for the submissions reviewed.

The GR090 ICP Missing files were examined for all revisions for the audit period. There were no records listed for any of the months.

HHR Aggregates files are prepared at ICP level based on submission information. Clause 15.8 states that the aggregates file should contain electricity supplied information rather than submission information and electricity supplied information is defined as shown below:

electricity supplied means, for any particular period, the information relating to the quantities of **electricity** supplied by **retailers** across **points of connection** to **consumers**, sourced directly from the **retailer's** financial records, including quantities—

- (a) that are metered or unmetered; and
- (b) supplied through normal **customer** supply and billing arrangements; and
- (c) supplied under sponsorship arrangements; and
- (d) supplied under any other arrangement

This differs from the Reconciliation Manager Functional Specification. In Section 3 of the Reconciliation Manager Functional Specification, HHR Aggregates information is described as: “...HHR submission information that is aggregated per ICP for the whole month (not half-hourly)”, which suggests an intention that this information should be sourced from submission information not electricity supplied information, which is covered by clause 15.7.

Type of information that is submission information	Description	Source	Classification in this document
information	electricity supplied information.		supplied
Monthly half-hour ICP aggregates	This is equivalent to the HHR submission information that is aggregated per ICP for the whole month (not half-hourly).	Purchasers (excluding direct consumers)	Monthly half-hour ICP aggregates

Data from the aggregates file is used to support other reporting by the Reconciliation Manager and will be of little value if it is based on Electricity Supplied data rather than submission data. Electricity Supplied data has a one month offset and invoicing is not required to occur within any specific timeframes.

Whilst the Code clearly states this file should be derived from financial records, I recommend CPPL liaises with other participants to consider recommending a Code change which will allow for the aggregates files used in the industry to remain unchanged. Non-compliance with the code is recorded below.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.4 With: Clause 15.8 From: 01-Feb-17 To: 30-Nov-17	HHR aggregates file does not contain electricity supplied information. Potential impact: None Actual impact: None Audit history: Once previously Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	This is an error in the code; CPPL is providing submission information as expected.		
Actions taken to resolve the issue		Completion date	Remedial action status
CPPL believes that the code is in error. We will support proposals to change the code to accurately reflect current industry practice.		n/a	Unknown
Preventative actions taken to ensure no further issues will occur		Completion date	
CPPL believes that the code is in error. We will support proposals to change the code to accurately reflect current industry practice.		n/a	

Audit outcome

Non-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 one of the techniques set out in clause 15.36(3) specified by the Authority.

Audit observation

Daylight saving processes for MEPs and agents reviewed as part of their audits.

I checked submission files for the change to daylight savings for 2017.

Audit commentary

Daylight savings processes for agents were reviewed as part of their audit, and found to be compliant.

The “trading period run on” technique is used for daylight saving adjustment. This was confirmed by checking adjustments for the start of daylight saving. The correct number of trading periods were recorded.

Audit outcome

Compliant

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 were no breaches for late provision of submission information.

I compared the HHR aggregates files to the HHR Vols files for a selection of two months and I checked the ICPMISS reports to confirm the accuracy of HHR information.

I checked the unmetered load submission at ICP level for one ICP.

I checked the process for the aggregation of the AV080 file and I compared the revision files for three months to identify any anomalies.

A sample of corrections were reviewed to ensure that they flowed through to revision submissions in **sections 8.1** and **8.2**.

Audit commentary

CPPL is required to prepare submission information for each NSP for the relevant consumption periods in accordance with the Code, the submission information should include:

- HHR volume information
- NHH volume information (forward or historic estimates); and
- unmetered load quantities for each ICP that has unmetered load associated with it.

The checks identified that HHR and unmetered submissions are correct.

In March 2017 there was an error with the AV080 file due to the reads for one ICP incorrectly indicating a “rollover”. This was identified by the RM. Checks are now in place to identify these types if discrepancies. There is also a check between revisions and against previous months to ensure errors are identified.

The unmetered load calculations are based on registry figures are were confirmed as correct.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 12.2 With: Clause 15.2, 15.4 and 15.12 of part 15 From: 01-Mar-17 To: 31-Mar-17	One incorrect AV080 file for March 2017. Potential impact: Medium Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1	
Audit risk rating	Rationale for audit risk rating	
Low	Controls are rated as strong because they have been strengthened since the error in March 2017. There was a minor impact on settlement, which was corrected, therefore the audit risk rating is low.	
Actions taken to resolve the issue		Completion date
The initial error was corrected in subsequent washups (from 3 months onward)		May 2017
Preventative actions taken to ensure no further issues will occur		Completion date
New checks have already been introduced to prevent anomalous readings being used in NHH submission.		May 2017
		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 by 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 checked the processes for ensuring submission information is aggregated to the correct level. I also checked the ICPCOMP and ICPMISS reports for a selection of months.

Audit commentary

The registry is used as the starting point for submissions and any discrepancies between the registry and the data in Orion are identified and resolved during the submission process.

The ICPMISS and ICPCOMP files confirmed the correct aggregation of submission information.

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

A registry list was reviewed to confirm that CPPL has not supplied any GIPs.

Audit commentary

Examination of the list file found that CPPL has not supplied any GIPs. CPPL is not required to report any grid owner volume information.

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

A registry list was reviewed to confirm that CPPL does not own any local or embedded networks.

Audit commentary

CPPL is not required to provide NSP submission information.

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

CPPL does not have any grid connected generation.

Audit commentary

CPPL does not have any grid connected generation.

Audit outcome

Non-compliant

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

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late.

Corrections were reviewed in **section 8.1** and **8.2**.

Audit commentary

No reconciliation submissions were made late.

All corrections were processed and submitted at the next available opportunity.

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

NHH volumes 14 month revisions were reviewed for January 2016 to August 2016 to identify any forward estimate still existing.

Audit commentary

All consumption information is based on HE for the period checked. The NHH meter reading reports also confirm that readings were obtained for all ICPs.

Audit outcome

Compliant

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 on 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

Aggregation and content of reconciliation submissions was reviewed.

Audit commentary

All active ICPs with meter category 3 or higher have a submission type of HHR.

Unmetered load is included in submissions and is calculated correctly.

CPPL does not supply any ICPs with profiles that require certification of the control device.

Aggregation of the AV080 and AV110 submissions is compliant.

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

Review of nine AV080 submissions to confirm that historic estimates are included and identified.

Permanence of meter readings is reviewed in **section 12.8**. The methodology to create forward estimates is reviewed in **section 12.12**.

Audit commentary

I reviewed the NHH system and confirm forward and historic estimates are correctly calculated and identified.

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 kWhPx 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

JCC prepares historic estimates for CPPL, based on actual and permanent estimate readings provided by CPPL since April 2016.

An audit completed in February 2017 by TEG & Associates confirmed that the historic estimate processes used are compliant. I checked whether the system had been changed and I also manually checked the scenarios of an ICP starting during a month and an ICP ending in a month.

Audit commentary

The HE scenario calculated correctly and it was confirmed that the RM Tool has not been changed during the audit period.

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

JCC prepares historic estimates for CPPL, based on actual and permanent estimate readings provided by CPPL since April 2016.

An audit completed in February 2017 by TEG & Associates confirmed that the forward estimate processes used are compliant. The system and processes have not changed since February 2017.

Audit commentary

JCC prepares historic estimates for CPPL, based on actual and permanent estimate readings provided by CPPL since April 2016.

An audit completed in February 2017 by TEG & Associates confirmed that the forward estimate processes used are compliant.

The only variation between revisions over 15% and 100,000 kWh is where an error occurred as recorded in Section 12.2. This matter was resolved at the time.

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

The event detail report from 01/08/2017 to 15/11/2017 was examined to identify all ICPs which had a profile change during the report period.

No ICPs had a profile change during this period.

Audit commentary

The event detail report from 01/08/2017 to 15/11/2017 was examined to identify all ICPs which had a profile change during the report period.

No ICPs had a profile change during this period.

Audit outcome

Not applicable

13. SUBMISSION FORMAT AND TIMING

13.1. Market Administrator Meter Reading Reports (Clauses 8 & 9 of Schedule 15.2)

Code reference

Clauses 8 & 9 of Schedule 15.2

Code related audit information

Provision of meter read frequency reports to the Authority, no later than 20 business days after the end of the month

Audit observation

I reviewed meter reading frequency report for February 2017 to May 2017, to ensure that they met the report requirements.

I reviewed processes to ensure the reports are accurate and submitted on time, and the timeliness of submission for a sample of reports.

Audit commentary

One report was reviewed and I confirmed that it met the report requirements.

Meter reading frequency reports are scheduled to be submitted by business day 20. I reviewed the report submissions for 2017. Five of the reports were submitted late, for the period June to October 2017. The late submission is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 13.1 With: Clauses 8 & 9 of Schedule 15.2 From: 20-Jun-17 To: 20-Oct-17	Five meter reading frequency reports submitted late. Potential impact: None Actual impact: None Audit history: Once Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as weak as they are not sufficient to mitigate risk most of the time. The late submissions had no impact on other participants, therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Reports have been provided to the EA		1/12/2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

Future reports will be co-ordinated with those for PUNZ.	01/02/2018	
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13.2. 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 ICP (clause 8(g)).*

Audit observation

The process to ensure that AV080 submissions are accurate was discussed in **section 12.2**.

Processes to ensure that information used to aggregate the reconciliation reports is consistent with the registry were reviewed in **section 2.1**.

Audit commentary

CPPL bases NHH and HHR aggregation factors on registry information.

Analysis of ICPCOMP and ICPMISS files confirmed compliance.

Audit outcome

Compliant

13.3. 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 two decimal places.

If the unrounded digit to the right of the second decimal place is greater than or equal to five, the second digit is rounded up, and if the digit to the right of the second decimal place is less than five, the second digit is unchanged.

Audit observation

I reviewed the rounding of data on the AV090, AV140 and AV080 reports as part of the aggregation checks.

Audit commentary

Rounding to two decimal places occurs at the time submission files are created. No other rounding or truncating occurs.

Audit outcome

Compliant

13.4. 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 timeliness of submissions of historic estimate was reviewed in **section 12.2**.

I reviewed nine months of AV080 reports to determine whether historic estimate requirements were met.

Audit commentary

The quantity of historical estimates is contained in the submission file, and is not a separate report. The three, seven and 14 month revision files were examined for a selection of nine months and compliance was achieved for all NSPs for all months.

Audit outcome

Compliant

CONCLUSION

The audit has examined past performance to evaluate likely future performance.

16 non compliances are recorded. Most are minor and only affect a small number of ICPs. Additional controls are required to ensure ongoing compliance of the registry update and validation processes.

PARTICIPANT RESPONSE

We will continue to seek compliance and improve identified areas.