

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT

The Veritek logo features the word "VERITEK" in a blue, serif, all-caps font. A thin blue vertical line is positioned to the left of the text, and a thin blue horizontal line is positioned below the text.

For

PLUS ENERGY LIMITED TRADING AS
COMMUNITY POWER

Prepared by: Tara Gannon

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Date audit report completed: 18 February 2020

Audit report due date: 1 March 2020

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EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **Plus Energy Limited trading as Community Power (Plus Energy)**, 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 V7.2.

Following a period of high wholesale electricity spot prices, the majority of Plus Energy's customers were switched to a gentailer. Plus Energy currently supplies 15 meter category 1 ICPs, which are settled as NHH or HHR.

Plus Energy engages JC Consulting for the performance of submission activities. All of the relevant tasks conducted by JC consulting were audited as part of this audit.

Eleven non-compliances were identified, each affecting a small number of ICPs or events. Because non-compliance must be recorded in every report section which applies to a non-compliant ICP or event, the audit risk rating score becomes inflated. For example, one photo reading which was treated as actual without being validated against a set of readings from another source was recorded as non-compliance in three sections.

The key areas that require some improvement are:

1. **CS content:** CS files are created manually, and some errors were identified during periods where large numbers of ICPs were switching out to Plus Energy's gentailer. It is expected that accuracy will improve with lower volumes, and Plus Energy intends to resolve the issues identified.
2. **Photo read validation:** photo readings should only be treated as validated actual readings where they have been validated by a set of readings from another source. Plus Energy intends to treat unvalidated photo reads as estimates in the future.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of 17, which results in an indicative audit frequency of 12 months. The issues identified were generally minor and affected a very small number of ICPs. In some cases an issue affecting one ICP caused non-compliance in several report sections which inflated the total audit risk rating score.

Considering this result along with the fact that all issues have a low audit risk rating and the small number of ICPs currently supplied, I recommend that the next audit is due in 24 months on 01/03/2022.

The matters raised are shown in the table below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Changes to registry information	3.3	10 Schedule 11.1	One late status update to active. One late status update to inactive. Two late trader updates.	Moderate	Low	2	Identified
Provision of information to the registry manager	3.5	9 Schedule 11.1	One late status update to active for a new connection.	Strong	Low	1	Identified
Gaining trader informs registry of switch request - switch move	4.7	9 Schedule 11.3	The NT files for 0000160283CKF22 (01/10/19) and 0000501126NR9FF (01/11/19) were issued more than two business days after pre-conditions were cleared.	Strong	Low	1	Identified
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	The CS files for ICPs 0136757030LC301 (01/10/19), 0000681305HB547 (01/10/19), 0000552005NR0FA (01/10/19) and 0000515333NRA7B (01/10/19) contained some errors. The average daily kWh in the CS file for 0000610644UN2C9 (01/10/19) did not reflect the average daily consumption between the last two actual reads, resulting in a difference of 13 kWh.	Moderate	Low	2	Identified
Metering information	4.16	21 Schedule 11.3	For one CS file issued by Plus Energy, the switch event read did not reflect the actual reading or best estimate of an actual reading on the event date.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	A photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source.	Moderate	Low	2	Identified
NHH meter reading application	6.7	6 Schedule 15.2	For one CS file issued by Plus Energy, the switch event read did not reflect the actual reading at the end of Plus Energy's last day of responsibility.	Moderate	Low	2	Identified
Identification of readings	9.1	3(3) Schedule 15.2	For two CS files issued by Plus Energy, switch event reads were recorded with an incorrect read type. A photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source.	Moderate	Low	2	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	Aggregates file contains submission information.	Strong	Low	1	Identified
Accuracy of submission information	12.7	15.12	A photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source.	Moderate	Low	2	Identified
Future Risk Rating						17	

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	Description	Recommendation
Electronic meter readings and estimated readings	9.6	Review of meter events which could affect meter accuracy	To achieve compliance, the meter event reports should be periodically checked for events which could affect accuracy, and these events should be followed up with the MEP. The MEPs can provide guidance on the event types that they report on, and what action they believe is appropriate. Given the number of ICPs, a monthly check of the event data provided should be sufficient.

ISSUES

Subject	Section	Description	Issue
		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.

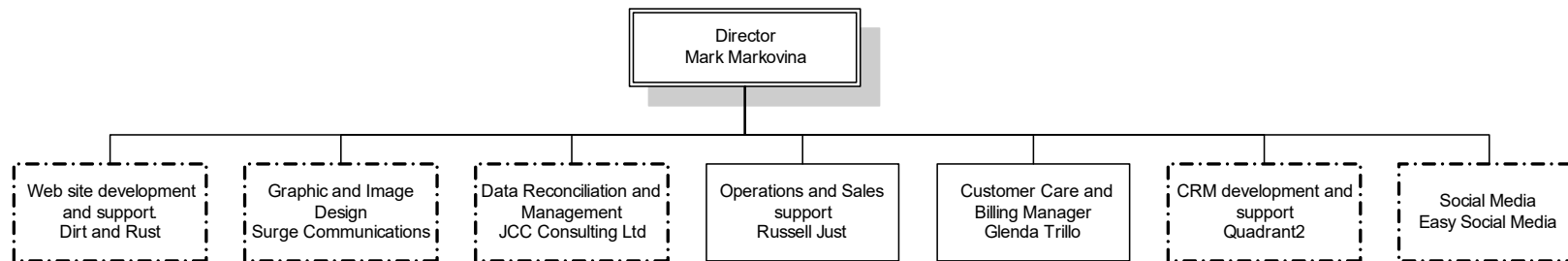
Audit commentary

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

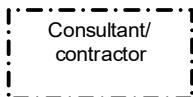
1.2. Structure of Organisation

Plus Energy provided a copy of their structure:

Plus Energy Limited (PLUS) trading as Community Power Organisational chart December 2019



Note:



1.3. Persons involved in this audit

Auditor:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Plus Energy personnel assisting with this audit:

Name	Title	
Russell Just	Operations and Sales Support	Plus Energy
John Candy	Director	JC Consulting

1.4. Use of Agents (Clause 15.34)

Code reference

Clause 15.34

Code related audit information

A reconciliation participant who uses an agent

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

Audit observation

This area was examined by interview to confirm Plus Energy understands their obligations.

Audit commentary

Plus Energy engages JC Consulting for the performance of submission activities. All of the relevant tasks conducted by JC consulting were audited as part of this audit.

Plus Energy engages Wells to conduct NHH manual data collection. Because the Wells audit is more than seven months old, additional checks were undertaken to confirm that there were no changes to Wells' processes or systems which could have a negative impact on Plus Energy's compliance, and checks were conducted for a sample of meter condition events.

1.5. Hardware and Software

The main systems are as follows:

- Access Database (RM Tool) provided and run by JC Consulting for NHH and HHR submission,
- the CRM interfaces with the registry to collect data, and
- Registry population is conducted manually.

1.6. Breaches or Breach Allegations

There are no breach allegations recorded by the Electricity Authority during the audit period.

1.7. ICP Data

All active ICPs are summarised by metering category in the table below.

Metering Category	Dec 2019	Jan 2019	2018
1	15	189	109
2	-	13	10
3	-	-	-
4	-	-	-
5	-	-	-
9	-	-	-
Blank	-	-	-

All ICPs on the list file are summarised on the table below.

Status	Number of ICPs (Dec 2019)	Number of ICPs (Jan 2019)	Number of ICPs (2018)
Active (2,0)	15	118	118
Inactive – new connection in progress (1,12)	-	1	1
Inactive – electrically disconnected vacant property (1,4)	1	-	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	-	-	-
Inactive – electrically disconnected at pole fuse (1,8)	-	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-	1	-
Inactive – reconciled elsewhere (1,5)	-	-	-
Decommissioned (3)	2	-	-

1.8. Authorisation Received

Plus Energy provided a letter of authorisation.

1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Plus Energy, 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 version 7.2.

Some or part of the functions Plus Energy is certified for are conducted by agents, as shown in the table below.

The table below shows the tasks under clause 15.38 of part 15 for which Plus Energy requires certification.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing Data
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) – Gathering and storing raw meter data	Wells – NHH data collection	AMS ARC Innovations Metrix The Lines Company (FCLM) SMCO
(c)(iii) - Creation and management of volume information	JC Consulting	
(d)(i) – Calculation of ICP days	JC Consulting	
(d)(ii) - delivery of electricity supplied information under clause 15.7	JC Consulting	
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	JC Consulting	
(e) – Provision of submission information for reconciliation	JC Consulting	

The functions performed by JC Consulting were audited at the same time as those conducted by Plus Energy, and the findings are documented in this report.

Wells has been audited in accordance with the Guidelines for Reconciliation Participant Audits, and the agent audit report is expected to be submitted along with this report. Because the Wells audit is more

than seven months old, additional checks were undertaken to confirm that there were no changes to Wells' processes or systems which could have a negative impact on Plus Energy's compliance, and meter condition events were checked. All current Plus Energy ICPs have category 1 HHR metering installed and receive electronic readings from the MEP.

AMS, Arc, Metrix, FCLM, and Smartco provide data as MEPs and are subject to a separate audit regime.

1.10. Summary of previous audit

Plus Energy's previous audit was conducted in March 2019 by Steve Woods of Veritek Limited. The summary tables below show the status of the non-compliances raised in the previous audit. Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non-compliance	Status
Relevant information	2.1	11.2, 15.2	Some registry and submission related errors.	Still existing
MEP arrangements	2.12	10.36	Arrangements not in place with seven MEPs.	Cleared
Registry population	3.5	9 of schedule 11.1	Two status updates were not processed within five business days of the event on the Registry.	Still existing
			The incorrect event date was used for one ICP.	Still existing
			One electrically connected ICP is still at the 1,12 status.	Cleared
Switching	4.3	5 Schedule 11.3	3 late CS files.	Still existing
	4.7	9 Schedule 11.3	One late NT file.	Still existing
	4.15	17 and 18 Schedule 11.3	4 late AW files.	Cleared
Meter reading targets	6.10	Clause 9(1) and (2) Schedule 15.2	3 ICPs not read within the 4-month window, exceptional circumstances not demonstrated.	Cleared
Electricity supplied	11.3	15.7 of part 15	One electricity supplied file not sent for Jan 2018.	Cleared
HHR aggregates	11.4	15.8 of part 15	Aggregates file contains submission information.	Still existing
Creation of submission information	12.2	15.5 of part 15	Late submission for one ICP.	Cleared

Subject	Section	Clause	Non-compliance	Status
HE reporting	13.3	10 of schedule 15.3	HE targets not met for some NSPs for the 3-month revisions.	Cleared

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

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

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

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

Audit observation

The process to find and correct incorrect information was examined. The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to confirm that information was correct and not misleading. The registry validation process was examined in detail in relation to the achievement of this requirement, and process documentation was reviewed.

Audit commentary

Registry status and trader updates are completed manually using the registry interface once the correct event dates and event attributes are confirmed. As part of this process, the user confirms that the update was successful.

Emails received from the registry engineer are directed to an email inbox and are cleared daily. These primarily relate to meters which are operating beyond their certification date.

Registry validation is completed weekly by JC Consulting, including checks of:

- switching activity and current agreed switch readings,
- status changes, pricing data changes, metering data changes, network data changes, and
- initial electrical connection date discrepancies.

Any issues are referred to Plus Energy for investigation and correction. Distributed generation and unmetered load detail changes are monitored by JC Consulting weekly and referred to Plus Energy to confirm the correct trader values and any action required.

The analysis of the list file and AC020 returned the following findings:

Item No.	Issue	Dec 2019	Comments
1	Status or status date mismatch between registry and Plus Energy	-	Compliant.
2	Active ICPs with blank MEP and no MEP nominated and UML = N	-	Compliant.

Item No.	Issue	Dec 2019	Comments
3	Incorrect submission flag	-	Compliant. Submission flags and profiles are consistent with the ICP metering information.
4	Active with blank ANZSIC codes	-	Compliant.
5	Active with ANZSIC "T999" not stated	-	Compliant.
6	Active with ANZSIC "T994" don't know	-	Compliant.
7	Active ICP with cat 9 and UML= N	-	Compliant.
8	ICPs with Distributor unmetered load populated but retail unmetered load is blank	-	Compliant. No active ICPs have unmetered load recorded.
9	ICPs with unmetered load flag Y but load is recorded as zero	-	Compliant. No active ICPs have unmetered load recorded.
10	ICPs with incorrect shared unmetered load	-	Compliant. No active ICPs have unmetered load recorded.
11	ICPs with Distributed Generation indicated but no DG profile	-	All ICPs with distributed generation indicated are settled as HHR. The meters are certified as HHR and the HHR profile is correctly assigned.
12	ICP at status "new connection in progress" (1,12) or "ready" (0,0) with an initial energisation date populated by the Distributor	-	Compliant. No ICPs have 1,12 or 0,0 status.
13	Active date variance with initial electrical connection date	1	Plus Energy's active status date was confirmed to be correct. Refer to section 3.5 .
15	Meter cat 3 or known commercial site with residential ANZSIC code	-	Compliant. All active ICPs have meter category 1.

Issues identified in the previous audit were followed up and confirmed to be resolved except the active status date for 0000570007NRAF2, which is still recorded as 23/07/18 but should be 19/07/18. The ICP has now switched to Genesis, and the status will not be updated.

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. I saw evidence during the audit that discrepancies identified were promptly investigated and updated.

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

Plus Energy receives meter readings from AMS, Arc, Metrix, FCLM, and Smartco as MEPs, and Wells as an agent. Readings are provided via SFTP.

I traced a diverse sample of readings for 15 ICPs from the source files to the RM Tool.

Audit commentary

All data transmissions to Plus Energy are via SFTP, which ensures the security and integrity of the data. Upon receipt, reading files are archived to a folder on the network.

I traced a diverse sample of readings for 15 ICPs including each MEP and agent from the source files to the RM Tool and found the readings matched the source files.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Audit observation

A complete audit trail was checked for all data gathering, validation and processing functions. I viewed audit trails in the RM tool.

Audit commentary

Audit trails include the activity identifier, date and time, and an operator identifier.

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 Plus Energy's terms and conditions for electricity supply.

Audit commentary

Plus Energy's standard terms and conditions with their customers includes consent to access for authorised parties for the duration of the contract.

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 Plus Energy's terms and conditions for electricity supply and discussed compliance with these clauses.

Audit commentary

Plus Energy's contract with their customers includes consent to access for authorised parties for the duration of the contract. Plus Energy confirmed that they have been able to arrange access for other parties when requested.

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:

- if practical in the circumstances, ensure that the metering installation is located at a point of connection; or*
- 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

The physical meter location point is not specifically mentioned in Plus Energy's terms and conditions for electricity supply, but the existing practices in the electrical industry achieve compliance. The registry list as at 10/12/19 was reviewed.

Audit commentary

All of Plus Energy's active ICPs have an MEP recorded and metering category 1. Loss compensation is not required.

Audit outcome

Compliant

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

Code reference

Clause 11.15B

Code related audit information

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

- the Authority to assign the rights and obligations of the trader under the contract to another trader if the trader commits an event of default under paragraph (a) or (b) or (f) or (h) of clause 14.41 (clause 11.15B(1)(a)); and*
- the terms of the assigned contract to be amended on such an assignment to—*
- the standard terms that the recipient trader would normally have offered to the customer immediately before the event of default occurred (clause 11.15B(1)(b)(i)); or*
- such other terms that are more advantageous to the customer than the standard terms, as the recipient trader and the Authority agree (clause 11.15B(1)(b)(ii); and*
- the terms of the assigned contract to be amended on such an assignment to include a minimum term in respect of which the customer must pay an amount for cancelling the contract before the expiry of the minimum term (clause 11.15B(1)(c)); and*
- the trader to provide information about the customer to the Authority and for the Authority to provide the information to another trader if required under Schedule 11.5 (clause 11.15B(1)(d)); and*

- the trader to assign the rights and obligations of the trader to another trader (clause 11.15B(1)(e)).

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

Audit observation

I reviewed Plus Energy's terms and conditions for electricity supply.

Audit commentary

Plus Energy's terms and conditions contain the appropriate clauses to achieve compliance with this requirement. This is contained in Section 27 "About this Contract".

Audit outcome

Compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

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

Audit observation

The new connection process was examined in detail to evaluate the strength of controls. The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were analysed to confirm whether process compliance and controls are functioning as expected. Process documentation was reviewed.

Audit commentary

The design of the new connections process does not allow ICPs to be connected without authorisation by Plus Energy, or an arrangement with an MEP.

One new connection was completed during the audit period, and responsibility acceptance and MEP nomination occurred as required by this clause. All of Plus Energy's active ICPs have an MEP recorded and metering category 1.

Audit outcome

Compliant

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

Code reference

Clause 10.33(1)

Code related audit information

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

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
 - *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
 - *if the ICP has metered load, one or more certified metering installations are in place*
 - *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

The new connection process was examined in detail, and process documentation was reviewed.

Audit commentary

Plus Energy claims ICPs at 1,12 (“inactive new connection in progress”) status which helps to ensure that the trader is recorded on the registry if an ICP is temporarily electrically connected.

One new connection was completed during the audit period, and the ICP was not temporarily electrically connected.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(1)

Code related audit information

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

- *for a point of connection to the grid – the grid owner has approved the connection*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
 - *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
 - *if the ICP has metered load, 1 or more certified metering installations are in place*
 - *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

The new connection process was examined in detail to evaluate the strength of controls.

The AC020 report and event detail report for 01/04/19 to 10/12/19 were examined to confirm process compliance and that controls are functioning as expected.

Audit commentary

All ICPs recorded as active with metering installed have an MEP recorded.

Review of the AC020 report and event detail report found there were no late certifications for new connections or reconnections.

No bridged meters were identified during the audit period.

Audit outcome

Compliant

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

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

Audit commentary

Plus Energy confirmed there are arrangements in place with all networks they currently trade on.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

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.

The registry list was reviewed to determine the MEPs for Plus Energy's ICPs.

Audit commentary

Plus Energy has arrangements in place with the MEPs for its active and inactive ICPs.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The new connection 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 Plus Energy. One new connection was completed, and an ICP number was obtained.

Audit outcome

Compliant

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

Code reference

Clause 11.7(2)

Code related audit information

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

Audit observation

The new connection process was examined in detail. The registry list as at 10/12/19, event detail report for 01/04/19 to 10/12/19, and AC020 report for 01/04/19 to 10/12/19 were analysed to evaluate the updating of the registry in relation to new connections. Process documentation for new connections was reviewed.

Audit commentary

The new connection process is detailed in **sections 2.9** and **3.5**.

One new connection was completed, and information was populated as required by this clause.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 11.1

Code related audit information

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

Audit observation

The process to manage status changes is discussed in detail in **sections 3.8** and **3.9** below. The process to manage trader updates, including MEP nominations was reviewed.

The AC020 report for 01/04/19 to 10/12/19 was reviewed to determine the timeliness of registry updates, and all late updates were reviewed. Process documentation for registry updates was reviewed.

Audit commentary

The AC020 report was reviewed to determine the timeliness of registry updates.

Status updates

Status updates are processed manually using the registry web interface once paperwork confirming the disconnection or reconnection details is received.

The timeliness of status updates to active (for reconnections) is set out on the table below.

Status	Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Active	2018	-	100%	2
	Jan 2019	-	100%	0.5
	Dec 2019	1	80%	4.8

The late update occurred because of a delay in receiving the reconnection paperwork. The late update was accurately processed from the correct event date.

The timeliness of status updates to inactive is set out on the table below.

Status	Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Inactive	2018	-	100%	3
	Jan 2019	-	100%	0.7
	Dec 2019	1	0%	11.0

The late update occurred because of a delay in processing the disconnection paperwork, which was received on the date of disconnection. The late update was accurately processed from the correct event date.

Trader updates

Trader updates are processed manually using the registry web interface once the correct event date and attributes are confirmed.

The timeliness of trader updates is set out on the table below.

Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Dec 2019	2	81.82%	16.82

Both late trader updates were backdated corrections and were accurately processed from the correct event date.

No late updates to ANZSIC codes were identified on the AC020 report.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 17-Apr-19 To: 02-Oct-19	One late status update to active. One late status update to inactive. Two late trader updates. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate because they are adequate to ensure that the registry is updated on time most of the time. The late paperwork was identified and chased up by Plus Energy.</p> <p>The risk is low as most updates were completed on time or soon after they were due. Some of the late updates were backdated corrections which improved data accuracy but caused a late registry update.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>In these instances we were reliant on receiving information from third parties, there was nothing we could do to avoid the delay.</p> <p>In the case of the new connection we made the MEP aware that we had not received the new connection information as we picked up that we had started to receive data from their meter (through the meter reads they send us). The MEP then provided the information and we entered the correct status date which showed up as being backdated.</p>		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>The back dating was due to the late arrival of the reports to us confirming the activity had taken place. In both cases the correct event dates have been imputed.</p> <p>In instances like these we are reliant on third parties informing us of certain activities therefore we cannot ensure there will be no further issues.</p>		28 Feb 2020	

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 AC020 report for 01/04/19 to 10/12/19 and registry list for 10/12/19 were examined to confirm whether all active ICPs have an MEP recorded, and MEP nominations were accepted. Process documentation for new connections was reviewed.

ICP decommissioning

The process for the decommissioning of ICPs was examined. The event detail report 01/04/19 to 10/12/19 was reviewed to identify all ICPs decommissioned during the period. All decommissioned ICPs were checked to prove the process and confirm controls are in place.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection process is discussed in detail in **sections 2.9** and **3.5**. Plus Energy nominates the MEP at the same time as taking the ICP to the “inactive new connection in progress” status.

One new connection was completed during the audit period. The MEP was nominated when the ICP was claimed at “inactive new connection in progress” status, prior to initial electrical connection.

All active metered ICPs have an MEP recorded, and review of the AC020 report did not identify any rejected MEP nominations.

ICP Decommissioning

ICPs that are vacant and either active or inactive will still be maintained within Plus Energy’s system and the RM tool. An attempt is made to read the meter at the time of removal and if this is not possible then the last actual meter reading is used. This last actual reading is normally the one taken at the time of disconnection. Plus Energy also advises the MEP responsible that the site is to be decommissioned, or has been decommissioned, dependent on the distributor’s process.

One ICP was decommissioned during the audit period because it was dismantled. Plus Energy met their obligation to arrange a meter interrogation prior to or upon meter removal, and the distributor advised the MEP of the decommissioning.

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.1

Code related audit information

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

- a) the participant identifier of the trader, as approved by the Authority (clause 9(1)(a))*
- b) the profile code for each profile at that ICP, as approved by the Authority (clause 9(1)(b))*
- c) the metering equipment provider for each category 1 metering or higher (clause 9(1)(c))*
- d) the type of submission information the trader will provide to the RM for the ICP (clause 9(1)(ea))*
- e) if a settlement type of UNM is assigned to that ICP, either:*

- the code ENG if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or
- in all other cases, the daily average kWh of unmetered load at the ICP (clause 9(1)(f)(ii)).
- the type and capacity of any unmetered load at each ICP (clause 9(1)(g))
- the status of the ICP, as defined in clauses 12 to 20 (clause 9(1)(j))
- except if the ICP exists for the purposes of reconciling an embedded network or the ICP has distributor status, the trader must provide the relevant business classification code applicable to the customer (clause 9(1)(k)).

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

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

Audit observation

The new connection process was examined in detail. The AC020 report for 01/04/19 to 29/11/19 was reviewed, and all late updates were examined.

The accuracy of all status event dates for new connections was checked by comparing the earliest active date, meter certification date (if available) and initial electrical connection date (if available) using the AC020 report. All discrepancies were checked against supporting information to confirm the correct status date.

Process documentation for new connections was reviewed.

Audit commentary

New connection information timeliness

The new connection process is described in detail in **section 2.9**. MEP nomination usually occurs when the ICP is at “inactive new connection in progress” status as part of the service request process.

The AC020 report did not record any late updates to “inactive new connection in progress” status.

The timeliness of status updates to active (for new connections) is set out on the table below.

Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2018	1	0%	21
Jan 2019	2	0%	11
Dec 2019	1	0%	13

I checked the late status update, and found it was primarily delayed by late receipt of the connection information.

New connection information accuracy

The earliest active date for the new connection completed during the audit period was compared to the distributor’s initial electrical connection date, and MEP’s certification date. Plus Energy’s active status date was confirmed to be correct.

ICP	Status Event Date	Initial Electrically Connected Date	Meter cert date
0001490023TG5EE	22/03/2019	20/03/2019	22/03/2019

Exceptions identified during the previous audit were followed up:

- the active status date for 0000570007NRAF2 is still recorded as 23/07/18 but should be 19/07/18, this is recorded as non-compliance in **section 2.1**, and
- the active status date for 0000570508NR029 has correctly been updated to 07/01/19.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: 10-Apr-19 To: 10-Apr-19	One late status update to active for a new connection. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong because the delay was primarily caused by late receipt of connection information. The late paperwork was identified and chased up by Plus Energy. The audit risk rating is low, because the update was made eight business days late.		
Actions taken to resolve the issue		Completion date	Remedial action status
We were able to identify that the MEP had not provided the new connection information through the meter reads we had started to receive. We advised the MEP that we had started receiving data and they then sent us the information. We entered the correct status date once the information was provided.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As we are reliant on third parties providing us this information we cannot ensure there will be no further issues in the future.		28 Feb 2020	

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.

The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to check ANZSIC codes, including active ICPs with T99 series or blank ANZSIC codes.

To confirm the validity of the ANZSIC codes selected I checked all active ICPs.

Audit commentary

Processes are in place to review ANZSIC codes on switch in, and any incorrect ANZSIC codes are corrected as they are discovered.

The validity of ANZSIC codes was checked:

- no ICPs with blank or T99 series ANZSIC codes were recorded on the AC020, and
- no ICPs have meter category two or higher.

I checked the validity of ANZSIC codes for all active ICPs, and found they were correctly assigned

Audit outcome

Compliant

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

Code reference

Clause 9(1)(f) of Schedule 11.1

Code related audit information

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

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

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

Audit observation

The process to manage unmetered load was examined. The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to identify any ICPs where unmetered load details were recorded, and/or there was a discrepancy between the distributor and trader unmetered load details.

Audit commentary

Distributor unmetered load details changes are monitored by JC Consulting weekly and referred to Plus Energy to confirm the correct trader values.

Review of the AC020 report and registry list found no active ICPs had trader or distributor unmetered load details recorded.

One ICP with standard unmetered load was supplied for part of the audit period and switched out effective from 01/10/19. The trader unmetered load was consistent with the distributor unmetered load details.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 11.1

Code related audit information

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

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

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

- the ICP has only 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** and **3.5**.

The process to manage unmetered load was examined. The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were reviewed to determine compliance.

- The timeliness and accuracy of data for new connections is assessed in **section 3.5**.
- The timeliness of data for reconnections is assessed in **section 3.3**, and all reconnections on the event detail and AC020 reports were checked for accuracy.

Audit commentary

Review of the registry list confirmed that all active ICPs have an MEP recorded. Customer start and end dates are recorded for each ICP, so that the customer responsible for an ICP on any given day can be determined.

ICP status is updated to active when a new connection is completed, or an ICP is reconnected on switching in.

The earliest active date for the new connection completed during the audit period was compared to the distributor’s initial electrical connection date, and MEP’s certification date. Plus Energy’s active status date was confirmed to be correct.

ICP	Status Event Date	Initial Electrically Connected Date	Meter cert date
0001490023TG5EE	22/03/2019	20/03/2019	22/03/2019

The AC020 report did not identify any ICPs with an initial electrical connection date populated which had not been made active.

All reconnections on the event detail and AC020 reports were checked, and I confirmed that the correct status and date had been applied.

Some late status changes to active are recorded as non-compliance in **sections 3.3** and **3.5**.

Audit outcome

Compliant

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were reviewed to determine compliance.

The inactive status of “new connections in progress” is usually used for all new connections. The list file was examined to identify any ICPs that had been at the “inactive new connection in progress” with an initial energisation date populated, and any ICPs that had been at this status for more than 24 months.

The process to manage ICPs at the other inactive statuses was examined. All disconnections on the event detail and AC020 reports were checked for accuracy.

The findings in relation to the timeliness of updates to registry are recorded in **section 3.3**.

Audit commentary

Plus Energy processes all status updates manually on the registry once paperwork is received.

All disconnections on the event detail and AC020 reports were checked to confirm that the correct status and date had been applied. No ICPs are currently at “inactive new connection in progress” status.

No examples of genuine consumption during inactive periods were identified. I found one ICP which was reconnected on switch in where there was a difference between the estimated switch event reading provided by the losing trader and the reconnection reading. All consumption was reported, including the difference between the switch event reading and reconnection reading.

Some late status updates to inactive are recorded as non-compliance in **section 3.3**.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Audit observation

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.

I analysed the registry list of ICPs with “new” or “ready” status.

Audit commentary

Plus Energy uses the status “inactive new connection in progress” and usually changes the status once it is set to “ready”. Analysis of the registry list found no ICPs were currently at “new” or “ready” status.

Any requests from distributors on ICPs which have been at “new” or “ready” status for more than two years will be investigated and responded to when they are received.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

A gaining trader must advise the registry manager of a switch no later than two business days after the arrangement comes into effect and include in its advice to the registry manager 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 Plus Energy deem all conditions to be met. A typical sample of five ICPs were checked to confirm that these were notified to the registry within two business days, and that the correct switch type was selected. Process documentation was reviewed.

Audit commentary

Plus Energy's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are created using the registry web interface as soon as all pre-conditions are met. The withdrawal process is used if the customer changes their mind.

Information on whether the customer is transferring between retailers at their current address or moving into a new address is collected through the application process. Transfer switch type is applied where a customer is transferring between retailers at an address.

Review of the event detail report found 20 transfer switch NTs were issued; all had metering category 1.

The five NT files checked were sent within two business days of pre-conditions being cleared, and the correct switch type was selected.

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

Within three business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the

date of receipt of such notification, and in any 12-month period, at least 50% of the event dates must be no more than 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 manager and a valid switch response code (clause 3(a)(i) and (ii) of Schedule 11.3); or*
- *providing a request for withdrawal of the switch in accordance with clause 17 (clause 3(c) of Schedule 11.3).*

When establishing an event date for clause 4, the losing trader may disregard every event date established by the losing trader for an ICP for which when the losing trader received notice from the registry manager under clause 22(a) the losing trader had been responsible for less than two months.

Audit observation

The event detail report for 01/04/19 to 10/12/19 was reviewed to identify all ANs issued for transfer switches. Process documentation was reviewed.

The switch breach report was examined for the audit period.

Audit commentary

ANs are created manually on the registry once an NT file is received, and Plus Energy's process documentation sets out the AN response codes which may be applied. AN files which are due are identified using the registry switch breach report.

No ANs were issued for transfer switches.

The switch breach report recorded one late AN file for a transfer switch, which was not a genuine breach.

Audit outcome

Compliant

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report for 01/04/19 to 10/12/19 was reviewed to reviewed to identify CS files issued by Plus Energy 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, and
- accuracy of average daily consumption.

I reviewed the event detail report to identify CS files with average daily kWh that was negative, zero, or over 200 kWh.

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

Process documentation was reviewed.

Audit commentary

CS timeliness

Plus Energy uses the switch breach report to identify files which are due. The switch breach report recorded one late CS file for a transfer switch, which was not a genuine breach.

CS content

CS files are created manually on the registry.

The Registry Functional Specification v22.21 states that average daily consumption within the CS file should be the average kWh per day for the last read period. Plus Energy calculates the average daily consumption based on the last billed period. While this may not always be consistent with consumption for the last read to read period where estimated reads are applied, it provides a reasonable indication of the average daily consumption.

No transfer CS files had average daily kWh that was negative, zero, or over 200 kWh.

The content of a sample of five transfer CS files were checked, focussing on CS files where there were inconsistencies between the event read type recorded and last actual read date. All CS content was confirmed to be correct.

Audit outcome

Compliant

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within four calendar months of the registry manager giving the gaining trader written notice of having received information about the switch completion, 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 change requests was examined, including review of process documentation.

The event detail report for 01/04/19 to 10/12/19 was reviewed to identify all read change requests and acknowledgements during the audit period.

I also checked for CS files with estimated readings provided by other traders where no RR was issued, to determine whether the correct readings were recorded.

The switch breach report for the audit period was reviewed.

Audit commentary

When a high or low read is identified through the read validation process for a new switch in, the ICP is investigated to determine whether a read change is required. RRs are issued manually using the registry web interface.

No read change requests were sent or received during the audit period. No transfer CS files with estimated reads where no RR was issued were identified.

The switch breach report did not record any late RR or AC files for transfer switches.

Audit outcome

Compliant

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report for the period from 01/04/19 to 10/12/19 was reviewed to identify all read change requests and acknowledgements where clause 6(2) and (3) of schedule 11.3 applied.

Audit commentary

Plus Energy did not issue or receive any read change requests where clause 6(2) and (3) of schedule 11.3 applied.

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

Audit observation

Disputes were discussed with Plus Energy.

Audit commentary

Plus Energy confirms 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 manager 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 manager the gaining trader must include:

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

Audit observation

The switch gain process was examined to determine when Plus Energy deem all conditions to be met. A typical sample of five ICPs were checked to confirm that these were notified to the registry within two business days, and that the correct switch type was selected. Process documentation was reviewed.

Audit commentary

Plus Energy's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are created using the registry web interface as soon as all pre-conditions are met. The withdrawal process is used if the customer changes their mind.

Information on whether the customer is transferring between retailers at their current address or moving into a new address is collected through the application process. Switch move is applied where a new customer is moving into the address.

Review of the event detail report found 26 switch move NTs were issued; all had metering category 1.

The five NT files checked had the correct switch type selected. Three files were issued within two business days of pre-conditions being cleared, two were issued two business days late. The NTs were late because staffing levels had been reduced during the affected period, following high electricity spot market prices.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.7 With: Clause 9 Schedule 11.3 From: 07-Oct-19 To: 10-Nov-19	The NT files for 0000160283CKF22 (01/10/19) and 0000501126NR9FF (01/11/19) were issued more than two business days after pre-conditions were cleared. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are currently rated as strong. The late files were a temporary issue, caused by a reduction in staff levels. The issue is not expected to recur, because reduced customer numbers have made the workloads more manageable with existing staff numbers. The impact is low, because two files were issued two business days late.		
Actions taken to resolve the issue		Completion date	Remedial action status
We will focus on processing files within the required timeframes.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We will give greater priority to compliance vs other non-compliance activities such as customer billing to help ensure we meet the requirement time lines in future.		28 Feb 2020	

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report for 01/04/19 to 10/12/19 was reviewed to:

- identify AN files issued by Plus Energy during the audit period,
- assess compliance with the requirement to meet the setting of event dates requirement, and
- all ANs were reviewed to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period to identify late AN and CS files for switch moves.

Audit commentary

ANs are created manually on the registry once an NT file is received, and Plus Energy's process documentation sets out the AN response codes which may be applied. All AN response codes were confirmed to be accurate.

The event detail report was reviewed for all three switch move ANs to assess compliance with the setting of event dates requirements:

- all had proposed event dates within ten business days of NT receipt, and
- no ANs had a proposed event dates were before the gaining trader's proposed event date.

AN and CS files which are due are identified using the registry switch breach report. The switch breach report was reviewed to determine whether switch move AN and CS files were issued on time. Three late AN files and eight late CS files were recorded for switch moves; none were genuine breaches.

Audit outcome

Compliant

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

Code reference

Clause 10(2) Schedule 11.3

Code related audit information

If the losing trader determines a different date, then within 10 business days of receiving notice the losing trader must also complete the switch by providing to the registry manager as described in subclause (1)(a):

- *the event date proposed by the losing trader; and*

- a valid switch response code; and
- final information as required under clause 1.

Audit observation

An event detail report for 01/04/19 to 10/12/19 was reviewed to identify AN files issued by Plus Energy during the audit period, and assess compliance with the setting of event dates requirements.

Audit commentary

Analysis found all three switch move ANs had a valid switch response code and compliant proposed event dates. No ANs had proposed event dates earlier than the gaining trader's proposed date.

Switches were completed as required by this clause.

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

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

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

Audit observation

The event detail report for 01/04/19 to 10/12/19 was reviewed to reviewed to identify CS files issued by Plus Energy 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, and
- accuracy of average daily consumption.

CS files with average daily kWh that was negative, zero, or over 200 kWh were identified. All of these CS files were checked to determine whether the average daily consumption was correct.

Audit commentary

CS files are created manually on the registry.

The Registry Functional Specification v22.21 states that average daily consumption within the CS file should be the average kWh per day for the last read period. Plus Energy calculates the average daily consumption based on the last billed period. While this may not always consistent with consumption for the last read to read period where estimated reads are applied, it provides a reasonable indication of the average daily consumption.

Analysis estimated daily kWh provided in CS files on the event detail report identified:

Estimated daily kWh	Count of switch move CS files	Findings
Negative	-	
Zero	1	The average daily kWh was confirmed to be correct.
More than 200 kWh	6	The average daily kWh for five of the ICPs was confirmed to be correct. ICP 0000610644UN2C9's average daily kWh took an estimated reading into account. The average daily kWh based on the last actual read to read period is 390, and the average daily consumption including the last estimated read is 377, resulting in a difference of 13 kWh.

The content of a sample of six switch move CS files were checked, focussing on CS files where there were inconsistencies between the event read type recorded and last actual read date. Four CS files contained some errors:

ICP (CS event date)	Incorrect information
0136757030LC301 (01/10/19)	<p>The CS file was initially provided with an incorrect event reading, reading type and average daily kWh, and was withdrawn and reissued with the correct reading, reading type and average daily kWh.</p> <p>The reissued file recorded the last actual read date as 30/09/19 but it should have been 26/09/19.</p>
0000681305HB547 (01/10/19)	<p>The CS file was initially provided with an incorrect last actual read date and was withdrawn and reissued with the correct date.</p> <p>The reissued file recorded an incorrect reading (33924 E instead of 38160 A) and the average daily kWh was recorded as 176 instead of 195.</p>
0000552005NR0FA (01/10/19)	<p>The switch event reading was recorded as actual, but no reading was received on the last day of responsibility. The read appears to be a reasonable estimate, because there was no consumption within the last read to read period.</p>
0000515333NRA7B (01/10/19)	<p>The CS files was initially provided with an incorrect read type. The switch event readings related to 27/09/19 and were recorded as actual, but did not relate to Plus Energy's last day of responsibility (30/09/19). Zero consumption was estimated up to the last day of responsibility.</p> <p>The reissued file recorded the readings as estimated, but the last actual read date was recorded as 30/09/19 instead of 27/09/19.</p>

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.10</p> <p>With: Clause 11 Schedule 11.3</p> <p>From: 01-Oct-19</p> <p>To: 01-Oct-19</p>	<p>The CS files for ICPs 0136757030LC301 (01/10/19), 0000681305HB547 (01/10/19), 0000552005NR0FA (01/10/19) and 0000515333NRA7B (01/10/19) contained some errors.</p> <p>The average daily kWh in the CS file for 0000610644UN2C9 (01/10/19) did not reflect the average daily consumption between the last two actual reads, resulting in a difference of 13 kWh.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate. Files are processed manually, which is reasonable given the relatively small number of transactions which are expected to occur. There is some room for errors to occur, and all of the files checked contained some incorrect information.</p> <p>The impact is assessed to be low, because the incorrect information may have a very minor impact on settlement. Two of the files with incorrect content were withdrawn and replaced.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>The primary issue here is that I have been entering the incorrect "Last Read Date" when an estimated read has been provided as the read for the last date of responsibility. I have not always been entering the Last Read Date as the date of the "Actual" last read received.</p> <p>For ICP 0000610644UN2C9 the most recent daily average consumption prior to switching was 377 and this had been entered however this was for a period covered by an estimate. The last Actual to Actual read daily average consumption was 390 which should have been entered, a variance of 13 kWhs.</p>		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Instructions have been provided by the Auditor on which date to use when entering an estimated read as at the last day of responsibility.</p>		28 Feb 2020	

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

Code reference

Clause 12 Schedule 11.3

Code related audit information

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

- *if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or*
- *if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter reading. In this case, the gaining trader, within four calendar months of the date the registry manager gives the gaining trader written notice of having received information about the switch completion, 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)):*
- *advise the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader (clause 12(3)(b)).*

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

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

Audit observation

The process for the management of read change requests was examined, including review of process documentation.

The event detail report for 01/04/19 to 10/12/19 was reviewed to identify all read change requests and acknowledgements during the audit period.

I also checked for CS files with estimated readings provided by other traders where no RR was issued, to determine whether the correct readings were recorded.

The switch breach report for the audit period was reviewed.

Audit commentary

When a high or low read is identified through the read validation process for a new switch in, the ICP is investigated to determine whether a read change is required. RRs are issued manually using the registry web interface.

No read change requests were sent or received during the audit period.

One switch move CS file with an estimated read where no RR was issued, and I confirmed that the correct reading was recorded in Plus Energy's system.

The switch breach report did not record any late RR or AC files for switch moves.

Audit outcome

Compliant

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 when a trader has an arrangement with a customer or embedded generator to trade electricity at an ICP at which the losing trader trades electricity with the customer or embedded generator, and one of the following applies at the ICP:

- *the gaining trader will trade electricity through a half hour metering installation that is a category 3 or higher metering installation; or*
- *the gaining trader will trade electricity through a non-AMI half hour metering installation and the losing trader trades electricity through a non-AMI non half hour metering installation; or*
- *the gaining trader will trade electricity through a non-AMI non half hour metering installation and the losing trader trades electricity through a non-AMI half hour metering installation*

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

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

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

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

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

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

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

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

Audit observation

The event detail report for 01/04/19 to 10/12/19 was reviewed to identify gaining trader switches requested by Plus Energy.

Audit commentary

No gaining trader switches were requested by Plus Energy.

All ICPs requested as transfer switches or switch moves had a metering category of 1.

Audit outcome

Compliant

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 manager, the losing trader must:

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

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

Audit observation

The event detail report for 01/04/19 to 10/12/19 was analysed to identify HH AN files issued by Plus Energy during the audit period.

The switch breach report was examined.

Audit commentary

The event detail report did not record any HH AN files issued by Plus Energy.

The switch breach report did not record any late AN files for HH switches.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The event detail report for 01/04/19 to 10/12/19 was analysed to identify HH CS files issued by Plus Energy during the audit period.

The switch breach report was examined.

Audit commentary

The event detail report did not record any HH CS files issued by Plus Energy.

The switch breach report did not record any late CS files for HH switches.

Audit outcome

Compliant

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

Audit observation

An event detail report for 01/04/19 to 10/12/19 was reviewed to:

- identify all switch withdrawal requests issued by Plus Energy, the content of a sample of at least two ICPs from the event detail report for each withdrawal code (or all if less than two were available) were checked using the typical sampling methodology,
- identify all switch withdrawal acknowledgements issued by Plus Energy, and
- confirm timeliness of switch withdrawal requests, as this is not currently being identified in the switch breach report.

The switch breach report was checked for any late switch withdrawal requests or acknowledgements.

Audit commentary

Withdrawals are processed manually on the registry, and the withdrawal code is chosen by the user based on the information available.

Nine NW files were issued by Plus Energy, relating to seven ICPs. Two NWs were rejected. Both were issued for 1001125519LC57C for date failure, and a third NW issued for the same reason was accepted.

None of the nine NWs were issued more than 60 business days after the event date.

All four AWs issued by Plus Energy were acceptances.

The switch breach report recorded four late NWs and one late AW; none were genuine breaches.

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.

Audit commentary

The reads applied in switching files were examined in **section 4.3** for standard switches, **section 4.10** for switch moves, and **sections 4.4** and **4.11** for read changes. The meter readings used in the switching process are validated meter readings or permanent estimates.

For the sample of CS files checked which had not been withdrawn and replaced, Plus Energy's event readings reflected the actual reading on their last day of responsibility or their best estimate of consumption up to their last day of responsibility except 0000681305HB547 (01/10/19), which was issued with 33924 E instead of 38160 A.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.16 With: Clause 21 Schedule 11.3 From: 01-Oct-19 To: 01-Oct-19	For one CS file issued by Plus Energy, the switch event read did not reflect the actual reading or best estimate of an actual reading on the event date. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, the issue occurred due to a manual data entry error. The audit risk rating is low, the difference between the readings is 4,236 kWh.		
Actions taken to resolve the issue		Completion date	Remedial action status
As you will see from this Audit report this ICP has been problematic for us. We had significant issues locating this meter and obtaining manual reads from our contractor and had used photo reads until the contractor reads commenced. We have reviewed the requirements for switching including use of "A" and "E", "Last Read Dates" and read data Instructions on when to use "E" vs "A". Further difficulties were experienced when the contractor sent an incorrect manual read. This read showed the unit consumption declined from the contractor's prior month reading by 5,00+ units. Fortunately our data providers systems picked up this error, so reconciliation was not impacted, and we picked up the error so customer billing was also not affected.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have reviewed the requirements for switching including use of "A" and "E", "Last Read Dates" and read data Instructions on when to use "E" vs "A" including when using a photo read.		28 Feb 2020	

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.

Win-back processes were discussed. The event detail report for 01/04/19 to 10/12/19 was analysed to identify all withdrawn switches with a CX code applied prior to the switch completion date for any switch save protected retailer.

Audit commentary

Plus Energy has been a switch save protected retailer since 03/04/2017, and does not complete win-backs. After an NT is received, the customer is contacted to confirm that the switch is authorised, but no enticements are offered.

I checked the event detail report for all withdrawn switches from the audit period. There were no switches that were withdrawn with the code "CX" applied.

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 give written notice to the traders responsible for the ICPs across which the unmetered load is shared, of the ICP identifiers of the ICPs.

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

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

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

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

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

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

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

Audit observation

The process to manage unmetered load was examined. The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to identify any ICPs where shared unmetered load details were recorded.

Audit commentary

Plus Energy does not supply any ICPs with shared unmetered load. Processes to monitor ICPs for additions and changes to unmetered load details are discussed in **section 3.7**.

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

The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to identify any unmetered load over 3,000 kWh per annum.

Audit commentary

One ICP with standard unmetered load was supplied for part of the audit period and switched out effective from 01/10/19. The unmetered load was below 3,000 kWh per annum.

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 retailer proposes to take or is taking to reduce the unmetered load.*

Audit observation

The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to identify any unmetered load over 6,000 kWh per annum.

Audit commentary

One ICP with standard unmetered load was supplied for part of the audit period and switched out effective from 01/10/19. The unmetered load was below 3,000 kWh per annum.

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

The registry list file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were examined to identify any DUML.

Audit commentary

Plus Energy does not supply any ICPs with unmetered load.

Audit outcome

Compliant

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 Clause 15.13

Code related audit information

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

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

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

- *there is 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

The registry list file as at 10/12/19, AC020 report for 01/04/19 to 10/12/19, and meter event details report were reviewed to determine compliance. Processes for distributed generation were reviewed.

Audit commentary

Metering installations installed

All active metered ICPs have an MEP, and at least one meter channel.

Plus Energy's new connection process includes a check that metering is installed before electrical connection occurs, and that any unmetered load is quantified.

No ICPs have submission information determined by subtraction.

Distributed generation

Plus Energy supplies five active ICPs with distributed generation recorded by the distributor. All ICPs with distributed generation indicated are settled as HHR and have EG registers. The meters are certified as HHR, and the HHR profile is correctly assigned.

Distributed generation changes are monitored by JC Consulting weekly and referred to Plus Energy to confirm the correct trader values and take any action required.

Bridged meters

No bridged meters were identified during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

- *provide to the grid owner a copy of the metering installation design (before ordering the equipment)*
- *provide at least 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.

Audit commentary

Review of the NSP table confirmed that Plus Energy 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 file as at 10/12/19 and AC020 report for 01/04/19 to 10/12/19 were reviewed to determine compliance.

Audit commentary

Plus Energy has only used the HHR and RPS profiles, and control devices are not used for reconciliation purposes.

Audit outcome

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. No examples of defective meters were identified during the audit period.

Audit commentary

Defective meters are typically identified through the meter reading validation process, or from information provided by the meter read provider.

Upon identifying a possible defective meter, Plus Energy will raise a field services job to investigate. No defective meters were identified during the audit period, so it was not possible to review examples of this process.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

- a) ensure the system is to within +/- 5 seconds of NZST or NZDST*
- b) compare the meter time to the system time*
- c) determine the time error of the metering installation*

- d) *if the error is less than the maximum permitted error, correct the meter's clock*
- e) *if the time error is greater than the maximum permitted error then:*
 - i) *correct the metering installation's clock*
 - ii) *compare the metering installation's time with the system time*
 - iii) *correct any affected raw meter data.*
- f) *download the event log.*

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

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

Audit observation

Plus Energy receives meter readings from AMS, Arc, Metrix, FCLM, and Smartco as MEPs, and Wells as an agent. Clock synchronisation processes for Wells and MEPs were reviewed as part of their agent and MEP audits. Agents and MEPs are to advise Plus Energy of clock synchronisation discrepancies and adjustments.

I traced a diverse sample of readings for 15 ICPs from the source files to the RM Tool.

Audit commentary

All information used to determine volume information is collected from the services interface or the metering installation by Wells or the MEP. Fulfilment of the interrogation systems requirements, and clock synchronisation was examined as part of the MEP and agent audits.

I reviewed the method to receive meter reading data from each MEP and agent. I traced a diverse sample of readings for 15 ICPs from the source files to RM tool including readings supplied by each MEP and Wells. All readings checked were recorded and labelled correctly.

Wells' data collection processes were reviewed as part of their agent audit in June 2019 and found to be compliant. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Plus Energy's compliance.

MEPs advise Plus Energy of clock synchronisation events. One example of a clock synchronisation event was received during the audit period; the ICP has a NHH submission type and no correction was required.

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.

Processes to provide meter condition information were reviewed as part of Wells' agent audit. Plus Energy's processes to manage meter condition information were reviewed.

Processes for customer and photo reads were reviewed.

Audit commentary

All current Plus Energy ICPs have category 1 HHR metering installed and receive electronic readings from the MEP.

Wells readings

Prior to switching out the majority of their ICPs from 01/10/19, Plus Energy received manual meter readings from Wells where non communicating AMI meters were present.

Compliance is recorded in Wells' June 2019 audit report. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Plus Energy's compliance.

During manual interrogation, the meter register value is collected and entered into a hand-held device. This reading is labelled as a reading, which denotes that it is a meter reading collected and validated by a meter reader.

Wells monitors meter condition, as required by schedule 15.2 and provides information on meter condition along with the daily reads, and monthly summary report containing missing seal and broken seal events. Meter condition information is received and reviewed by Plus Energy where Wells takes readings, and no meter condition issues that could affect accuracy were identified during Wells' audit, or this audit.

I checked a sample of ten readings provided by Wells and confirmed that they are loaded into the RM Tool as actual readings and are validated.

Customer and customer photo readings

Customer and photo reads are only accepted where it is not possible to obtain readings taken by the MEP, Wells, or Plus Energy staff.

I found one instance where a customer had provided a photo reading for 0000681305HB547 on 09/04/19. The manual reading was transferred to JC Consulting and was treated as an actual validated read by the HE calculation process. The photo readings were not validated against a set of readings from another source.

In the rare event that customer readings are obtained by Wells, a no read is recorded, and customer reading is inserted in the notes. No examples of this were available during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 6.6</p> <p>With: Clause 3(1), 3(2) and 5 Schedule 15.2</p> <p>From: 09-Apr-19</p> <p>To: 09-Apr-19</p>	<p>A photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as moderate, because customer and photo readings are rarely received, but where they are received, they are treated as validated readings. Photo readings are no longer expected because all ICPs currently supplied have HHR meters.</p> <p>The audit risk rating is low. The incorrectly classified photo reading could have a minor impact on submission if it was found to be incorrect. I viewed the photo and confirmed that the correct reading had been supplied to JC Consulting and entered into the RM tool.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Participant comments By way of feedback...We find photo reading to be more reliable than manual reads from contractors. We have had experiences of manual reads being entered incorrectly when being captured by contractors. We find it hard to understand that 2 validated reads from additional sources would be required at the same time the photo read is being relied upon, given photo reads are used sparingly for the rare situations where an electronic read and a manual read are not available.</p> <p>For example the Wells read for this ICP taken on the 28th of August was for 5,752 units LESS than their previous read just 30 days prior. Yet no alert was given to us or any correction made by Wells, they just sent us the incorrect read.</p> <p>Both our data reconciliation and billing systems and processes identified the Wells read error and we were able to ignore the Wells read and make an estimate for that month.</p> <p>We have been able to validate the photo read from 2 subsequent and correct Wells manual reads, but these were not available at the time we relied on the photo read.</p> <p>We have received instructions from the Auditor to in future use "E" for photo reads and not "RD" unless we have 2 validated reads from additional sources at the time we are relying on the photo read. Given its highly unlikely we would ever have 2 validated reads from additional sources at the time of relying on a photo read we will in future use "E" for all photo reads.</p>		28 Feb 2020	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
In future we will record all photo reads as "E" unless there are 2 validated reads from other sources available at the same time we are relying on the photo read.	28 Feb 2020	

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

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 except in the case of a switch event meter reading which applies to the end of the day prior to the event date for the losing trader and the start of the event date for the gaining trader as required by this clause.

All AMI systems have a clock synchronisation function, which ensures correct time-stamping. Manual readings taken by Wells are applied correctly.

Application of reads was reviewed as part of the historic estimate checks in **section 12.11** and found to be compliant.

The content of CS and RR files was examined in **sections 4.3, 4.4, 4.10 and 4.11**. For the sample of CS and RR files checked which had not been withdrawn and replaced, Plus Energy's event readings reflected the actual reading on their last day of responsibility or their best estimate of consumption up to their last day of responsibility except 0000681305HB547 (01/10/19), which was issued with 33924 E instead of 38160 A.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.7 With: Clause 6 Schedule 15.2 From: 01-Oct-19 To: 01-Oct-19	For one CS file issued by Plus Energy, the switch event read did not reflect the actual reading at the end of Plus Energy's last day of responsibility. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, the issue occurred due to a manual data entry error. The audit risk rating is low, the difference between the readings is 4,236 kWh.		
Actions taken to resolve the issue		Completion date	Remedial action status
This is the same ICP referred to in 6.6. above. This was a result of human error. The read data for this ICP had been corrupted by an incorrect reading supplied by a contractor (manual read) and we compounded the error by entering incorrect data at the time of switching.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have reviewed the requirements for entering data during the switch process.		28 Feb 2020	

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 reviewed. Reporting on ICPs not read during the period of supply was examined.

Audit commentary

A validated meter reading must be obtained in respect of every meter register for every NHH 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".

All current Plus Energy ICPs have category 1 HHR metering installed and receive electronic readings from the MEP.

JC Consulting advises Plus Energy of any ICPs where a read has not been received in the previous four months, so that action can be taken to obtain a reading. Where the period of supply is less than four months, it is likely that no action will be taken to obtain readings.

JC Consulting confirmed that all ICPs received an actual reading during the period of supply where the period of supply ended between 01/04/19 and 31/10/19.

Audit outcome

Compliant

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

Code reference

Clause 8(1) and (2) Schedule 15.2

Code related audit information

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

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

Audit observation

The meter reading process was examined. Monthly reports May to November 2019 were provided and reviewed to determine whether they met the requirements of clauses 8 and 9 of schedule 15.2, and whether the meter reading attainment threshold was met.

Audit commentary

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Apr-19	19	-	-	100.0%

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
May-19	19	-	-	100.0%
Jun-19	21	-	-	100.0%
Jul-19	24	-	-	100.0%
Aug-19	28	-	-	100.0%
Sep-19	27	-	-	100.0%
Oct-19	26	-	-	100.0%
Nov-19	24	-	-	100.0%

As discussed in **section 6.8**, there are processes in place to monitor read attainment, and attempt to resolve issues preventing read attainment.

I reviewed meter reading frequency reports for May to November 2019 and confirmed that they met the meter reading frequency report requirements. I reviewed submission confirmations for meter reading frequency reports for August to November 2019 and found the submissions were made on time.

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

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

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

Audit observation

The meter reading process was examined. Monthly reports May to November 2019 were reviewed.

One ICP was unread in the four months ended April 2019 and was reviewed to determine whether exceptional circumstances existed. The ICP was connected to an NSP where two NHH ICPs are supplied, and less than 90% read attainment was achieved.

Audit commentary

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	Total ICPs unread for 4 months	Overall percentage read
Apr-19	32	1	1	99.4%
May-19	31	-	-	100.0%
Jun-19	34	-	-	100.0%
Jul-19	35	-	-	100.0%
Aug-19	33	-	-	100.0%
Sep-19	33	-	-	100.0%
Oct-19	32	-	-	100.0%
Nov-19	31	-	-	100.0%

As discussed in **section 6.8**, there are processes in place to monitor read attainment, and attempt to resolve issues preventing read attainment.

One ICP was unread in the four months ended April 2019. ICP 0000681305HB547 was connected to an NSP where two NHH ICPs are supplied, and less than 90% read attainment was achieved. I found that Plus Energy had met the best endeavours requirements by attempting to arrange an upgrade to an AMI meter, scheduling a manual meter reading which could not be obtained because the meter was not located, and contacting the customer to arrange access. The meter upgrade was not carried out, and Wells meter readings were obtained on 29/07/19 and 28/08/19. The ICP switched out effective 01/10/19.

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

NHH data is collected by MEPs and Wells. The data interrogation log requirements were reviewed as part of their agent and MEP audits.

Audit commentary

Compliance with this clause has been demonstrated by Plus Energy's agents and MEPs as part of their own audits.

I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Plus Energy's compliance.

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

Review of a registry list for 10/12/19 confirmed that Plus Energy has not supplied any HHR ICPs with metering category 3 or higher.

Plus Energy supplies five meter category 1 ICPs which are settled as HHR using AMI data provided by MEPs.

Audit commentary

HHR data is collected by MEPs from the services access interface.

Audit outcome

Not applicable

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

Review of a registry list for 10/12/19 confirmed that Plus Energy has not supplied any HHR ICPs with metering category 3 or higher.

Plus Energy supplies five meter category 1 ICPs which are settled as HHR using AMI data provided by MEPS.

Audit commentary

All HHR data is collected by MEPS.

Audit outcome

Not applicable

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Review of a registry list for 10/12/19 confirmed that Plus Energy has not supplied any HHR ICPs with metering category 3 or higher.

Plus Energy supplies five meter category 1 ICPs which are settled as HHR using AMI data provided by MEPS.

Audit commentary

All HHR data is collected by MEPS.

Audit outcome

Not applicable

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

Review of a registry list for 10/12/19 confirmed that Plus Energy has not supplied any HHR ICPs with metering category 3 or higher.

Plus Energy supplies five meter category 1 ICPs which are settled as HHR using AMI data provided by MEPS.

Audit commentary

All HHR data is collected by MEPS.

Audit outcome

Not applicable

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

Code reference

Clause 18 Schedule 15.2

Code related audit information

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

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

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

Audit observation

Processes to archive and store raw meter data were reviewed. The oldest raw meter data available was viewed, to confirm it is retained. Audit trails were reviewed in **section 2.4**.

Audit commentary

Compliance is recorded in Wells' June 2019 audit report. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Plus Energy's compliance.

All raw reading files are retained by JC Consulting indefinitely, and during the audit I viewed files from when Plus Energy began trading in 2017.

Review of audit trails in **section 2.4** confirmed that reads cannot be modified without an audit trail being created. Access to modify readings is restricted through log on privileges.

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

External control equipment logs are not used by Plus Energy.

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 a reconciliation participant detects errors while validating non-half hour meter readings, the reconciliation participant must:

19(1)(a) - confirm the original meter reading by carrying out another meter reading

19(1)(b) - replace the original meter reading the second meter reading (even if the second meter reading is at a different date)

19(1A) if a reconciliation participant detects errors while validating non half hour meter readings, but the reconciliation participant cannot confirm the original meter reading or replace it with a meter reading from another interrogation, the reconciliation participant must:

- *substitute the original meter reading with an estimated reading that is marked as an estimate;*
- and*
- *subsequently replace the estimated reading in accordance with clause 4(2)*

Audit observation

Processes for the correction of NHH meter readings were reviewed.

Audit commentary

NHH corrections are processed by JC Consulting as Plus Energy's agent. The process documentation contains appropriate processes which achieve compliance.

Defective meters

Defective meters are typically identified through the meter reading validation process, or from information provided by the meter read provider. No defective meters were identified during the audit period.

Multiplier corrections

No incorrect multipliers were identified during the audit period, and there have been no multiplier corrections.

Bridged meter corrections

No bridged meters were identified during the audit period.

Inactive ICPs with consumption

The validation process identifies any ICPs with consumption during an inactive period. The registry status records are corrected to active for the affected period, and all consumption is submitted.

No examples of genuine consumption during inactive periods were identified. I found one ICP which was reconnected on switch in where there was a difference between the estimated switch event reading provided by the losing trader and the reconnection reading. All consumption was reported, including the difference between the switch event reading and reconnection reading.

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 a reconciliation participant detects errors while validating half hour meter readings, the reconciliation participant must correct the meter readings as follows:

19(2)(a) - if the relevant metering installation has a check meter or data storage device, substitute the original meter reading with data from the check meter or data storage device; or

19(2)(b) - if the relevant metering installation does not have a check meter or data storage device, substitute the original meter reading with data from another period provided:

- (i) The total of all substituted intervals matches the total consumption recorded on a meter, if available; and*
- (ii) The reconciliation participant considers the pattern of consumption to be materially similar to the period in error*

Audit observation

Processes for the correction of HHR meter readings were reviewed.

Audit commentary

HHR corrections are processed by JC Consulting as Plus Energy's agent. Corrections are created based on the best information available. Where readings are available, they are used in conjunction with a profile to back fill missing data, and where readings are unavailable an estimate is created based on historic information.

The estimates are created in an Excel tool then imported into the RM tool and labelled as "E" for estimated. The RM tool contains a record of file name, date and time. Estimates are recorded at trading period level not daily level.

No HHR corrections were processed during the audit period.

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

A reconciliation participant may use error compensation and loss compensation as part of the process of determining accurate data. Whichever methodology is used, the reconciliation participant must document the compensation process and comply with audit trail requirements set out in the Code.

Audit observation

The physical meter location point is not specifically mentioned in Plus Energy's terms and conditions for electricity supply, but the existing practices in the electrical industry achieve compliance.

The registry list as at 10/12/19 was reviewed.

Audit commentary

All of Plus Energy's active ICPs have an MEP recorded and metering category 1. Loss compensation is not required.

Audit outcome

Compliant

8.4. Correction of HHR and NHH raw meter data (Clause 19(4) and (5) Schedule 15.2)

Code reference

Clause 19(4) and (5) 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:

19(5)(a)- the date of the correction or alteration

19(5)(b)- the time of the correction or alteration

19(5)(c)- the operator identifier for the person within the reconciliation participant who made the correction or alteration

19(5)(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

19(5)(e)- the technique used to arrive at the corrected data

19(5)(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 for MEPs and agents was reviewed as part of their own audits.

Audit commentary

Raw meter data is held by the MEPs and agents. Compliance was confirmed as part of their agent and MEP audits.

JC Consulting only corrects working data and keeps an appropriate audit trail.

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

A sample of reads and volumes were traced from the source files to Plus Energy's systems in **section 2.3**.

Provision of estimated reads to other participants during switching was reviewed in **sections 4.3, 4.4, 4.10 and 4.11**.

Correct identification of estimated reads, and review of the estimation process was completed in **sections 8.1, 8.2 and 9.4**.

Audit commentary

Estimated readings are clearly identified as required by this clause.

I found that for the following CS files, the correct switch read type was not applied:

ICP (CS event date)	Switch type	Incorrect information
0000681305HB547 (01/10/19)	MI	The incorrect read and read type were applied (33924 E instead of 38160 A).
0000552005NR0FA (01/10/19)	MI	The incorrect read type was applied (A instead of E), and the estimated reading was reasonable.

As discussed in **section 6.6**, a photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 9.1 With: Clause 3(3) Schedule 15.2 From: 01-Oct-19 To: 05-Dec-19	For two CS files issued by Plus Energy, switch event reads were recorded with an incorrect read type. A photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate.</p> <ul style="list-style-type: none"> CS files are processed manually, which is reasonable given the relatively small number of transactions which are expected to occur. There is some room for errors in read labelling to occur. Photo readings are rarely received because all ICPs currently supplied have HHR metering installed. Where photo readings have been supplied, they are treated as actual readings. <p>The audit risk rating is low.</p> <ul style="list-style-type: none"> All the switch event reads are treated as actual or permanent estimate readings, so there is no impact on submission. The incorrectly classified photo reading could have a minor impact on submission if it was found to be incorrect. Photo readings are no longer expected because all ICPs currently supplied have HHR meters. I viewed the photo and confirmed that the correct reading had been supplied to JC Consulting and entered into the RM tool. 		
Actions taken to resolve the issue		Completion date	Remedial action status
These issues have been addressed and commented on above.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As per previous comments re these issues and ICPs.		28 Feb 2020	

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 to 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 traced a sample of meter data from the source files to Plus Energy's systems as discussed in **section 2.3**, to confirm whether readings were rounded or truncated on import.

Audit commentary

The MEP or agent retains raw, unrounded data. Compliance was demonstrated by the MEPs during their own audits.

Data provided by the MEPs and agents is not rounded or truncated. Submission data is rounded to two decimal places.

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

Processes for the estimation of HHR meter readings were reviewed.

Audit commentary

Estimates are created based on the best information available. Where readings are available, they are used in conjunction with a profile to back fill missing data, and where readings are unavailable an estimate is created based on historic information.

The estimates are created in an Excel tool then imported into the RM tool and labelled as "E" for estimated. The RM tool contains a record of file name, date and time. Estimates are recorded at trading period level not daily level.

Estimates provided by Metrix are not used.

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 conducted a walkthrough of the validation processes. The JC Consulting RM Submission Process documentation and Submission Checklist were reviewed.

All current Plus Energy ICPs have category 1 HHR metering installed and receive electronic readings from the MEP.

Audit commentary

Compliance is recorded in Wells' June 2019 audit report. I confirmed with Wells that there were no changes to their processes or systems since their June 2019 audit that could have a negative impact on Plus Energy's compliance.

For meters read by Wells, a localised validation occurs at the hand-held device to ensure the reading is within expected high/low parameters. Readings which fail this validation are required to be re-entered, and if the two readings are the same the second reading will be accepted. If the second reading is different (potentially indicating the first reading was incorrect) then the second reading is required to be re-entered. Wells also provide meter condition information, as discussed in **section 6.6**.

Points "a" and "b" above are conducted by JC Consulting when data is loaded into the RM tool. Loading cannot occur unless there is an ICP, meter, register and date match. The RM tool also identifies missing start and end reads.

Point "c" above is managed by Plus Energy where they manually check each invoice before it is sent to ensure it is reasonable. All invoices contain a graph to assist with this check.

Point "d" is conducted in the RM Tool where excessive, negative, and zero consumption examples are identified and reported to Plus Energy. I checked the most recent zero consumption report. The report was blank, which indicated that no ICPs with zero consumption were found.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

I reviewed the HHR and AMI data validation processes, including meter event logs and validation checks.

Audit commentary

JC Consulting check for missing data, invalid dates and times; and unexpected zeros and register readings are compared to the sum of intervals. There is also an invoice review by Plus Energy to ensure there are no unexpected changes to the consumption patterns. All invoices contain a graph to assist with this check.

Event files are provided by MEPs either routinely, or where events which could affect meter accuracy occur. These files are received via SFTP but are not reviewed by JC Consulting.

Description	Recommendation	Audited party comment	Remedial action
Review of meter events which could affect meter accuracy	To achieve compliance, the meter event reports should be periodically checked for events which could affect accuracy, and these events should be followed up with the MEP. The MEPs can provide guidance on the event types that they report on, and what action they believe is appropriate - given the number of ICPs, a monthly check of the event data provided should be sufficient.	We will review the MEP files again to assess their value. Previous reviews of these files showed little to no value for us as the retailer with lots of files with non-relevant information/data being provided rendering a review of all files wasteful of resources. We appreciate the Auditors advice to focus on those files that could affect accuracy and note that we can get from the MEPs guidance on the events types and what action is required by us, the retailer, vs them as the meter equipment owner/provider.	Identified

No meter events which could affect meter accuracy were identified during the audit period. JC Consulting provided meter event files received during the audit period, and they did not contain any events which could affect accuracy. FCLM provides meter event information only if events occur. One example of a meter event was provided for FCLM, relating to a tamper alarm, which became active and inactive at the same millisecond implying that it was likely to have been caused by vibration.

One example of a clock synchronisation event was received during the audit period; the ICP has a NHH submission type and no correction was required.

Compliance is recorded because no events requiring further action were identified during the audit period.

Audit outcome

Compliant

10. PROVISION OF METERING INFORMATION TO THE GRID OWNER 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 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

The NSP table on the registry was reviewed.

Audit commentary

Plus Energy is not responsible for any NSPs. No information is provided to the grid owner 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 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 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

The NSP table on the registry was reviewed.

Audit commentary

Plus Energy is not responsible for any NSPs. No information is provided to the grid owner 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

The NSP table on the registry was reviewed.

Audit commentary

Plus Energy is not responsible for any NSPs. No information is provided to the grid owner 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 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

The NSP table on the registry was reviewed.

Audit commentary

Plus Energy is not responsible for any NSPs. No information is provided to the 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 give notice to the reconciliation manager if it is to commence or cease trading electricity at a point of connection using a profile with a profile code other than HHR, RPS, UML, EG1, or PV1 at least five business days before commencing or ceasing trader.

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

Audit observation

The registry list file 01/05/19 to 10/12/19 was reviewed to identify the profiles used during the audit period.

Audit commentary

Plus Energy used the RPS, PV1 and HHR profiles during the audit period. Trading notifications were not required.

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

ICP days submissions are completed by JC Consulting as an agent. The process for the calculation of ICP days was examined by checking all NSPs on the NHH and HHR AV110 submissions for November 2019.

I reviewed GR100 reports from April 2018 to November 2019 and investigated all NSP level ICP days differences, to determine why the difference had occurred.

Audit commentary

The process for the calculation of ICP days was examined by checking all NSPs on the NHH and HHR AV110 submissions for November 2019. The ICP days calculation was confirmed to be correct.

The following table shows the ICP days difference between Plus Energy's database and the RM return file (GR100) for April 2018 to November 2019.

Month	Ri	R1	R3	R4	R5	R7	R8	R14	R16
Apr 2018	-	-	-	-	-	-	-	0.0%	-
May 2018	-	-	-	-	-	-	-	0.0%	-
Jun 2018	-	-	-	-	-	-	-	0.0%	0.0%
Jul 2018	-	-	-	-	-	-	-	0.0%	-
Aug 2018	-	-	-	-	-	-	-	0.0%	-
Sep 2018	-	-	-	-	-	-	-	0.0%	-
Nov 2018	-	-	-	-	-	0.0%	-	-	-
Dec 2018	-	-	-	-	-	0.0%	0.0%	-	-
Jan 2019	-	-	-	-	-	0.0%	-	-	-
Feb 2019	-	-	-	-	-	0.0%	-	-	-
Mar 2019	-	-	0.0%	-	-	0.0%	-	-	-
Apr 2019	-	-	0.0%	-	-	0.0%	-	-	-
May 2019	0.0%	0.0%	0.0%	-	0.0%	-	-	-	-
Jun 2019	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-
Jul 2019	0.0%	0.0%	0.0%	-	-	-	-	-	-
Aug 2019	0.0%	0.0%	0.0%	-	-	-	-	-	-
Sep 2019	0.2%	0.0%	-	-	-	-	-	-	-
Oct 2019	-19.0%	0.0%	-	-	-	-	-	-	-

Month	Ri	R1	R3	R4	R5	R7	R8	R14	R16
Nov 2019	0.5%	-	-	-	-	-	-	-	-

I reviewed all NSP level ICP days differences and found they related to switch timing and been washed up or are expected to be washed up through the revision process. Although the percentage difference for the October 2019 initial submission was 19.0% the difference was 62 days and related to backdated switches for two ICPs.

Breach information provided by the Electricity Authority did not identify any late ICP days submissions.

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

Electricity supplied submissions are completed by JC Consulting as an agent.

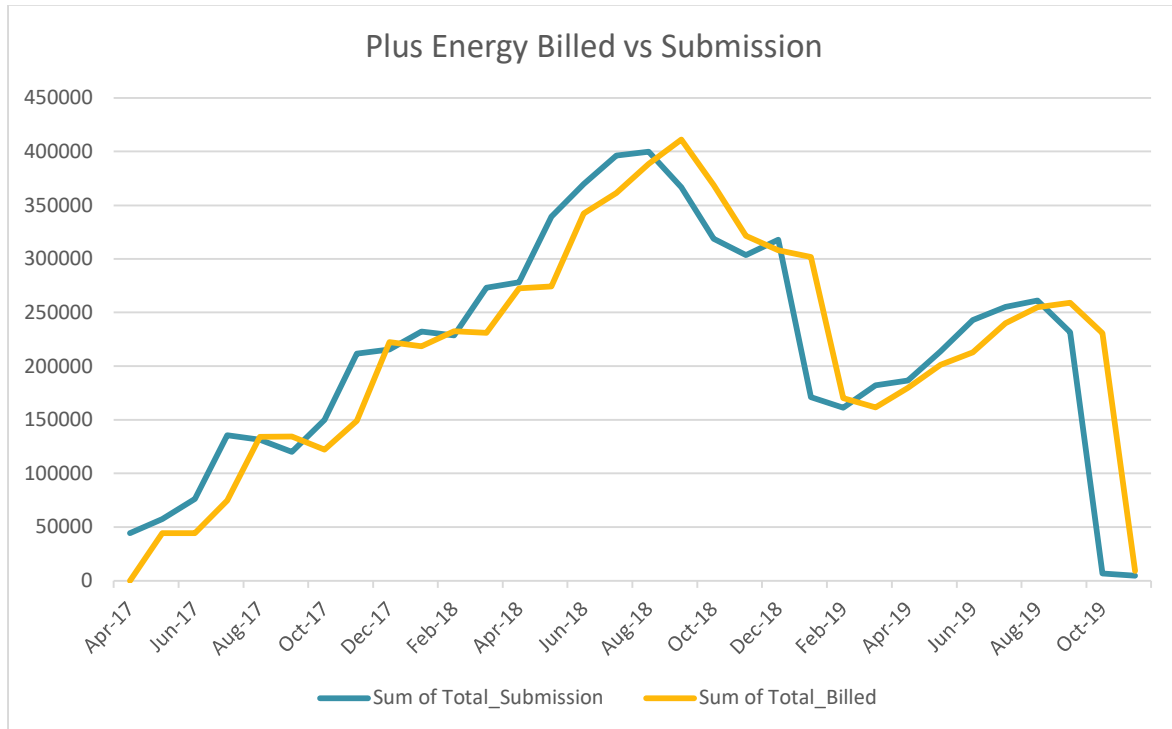
The process for the calculation of as billed volumes was examined by checking the AV120 submission volumes against billed data for May 2019 to November 2019 to confirm the AV120 calculation was correct.

GR130 reports since Plus Energy began trading were reviewed to confirm whether the relationship between billed and submitted data appears reasonable.

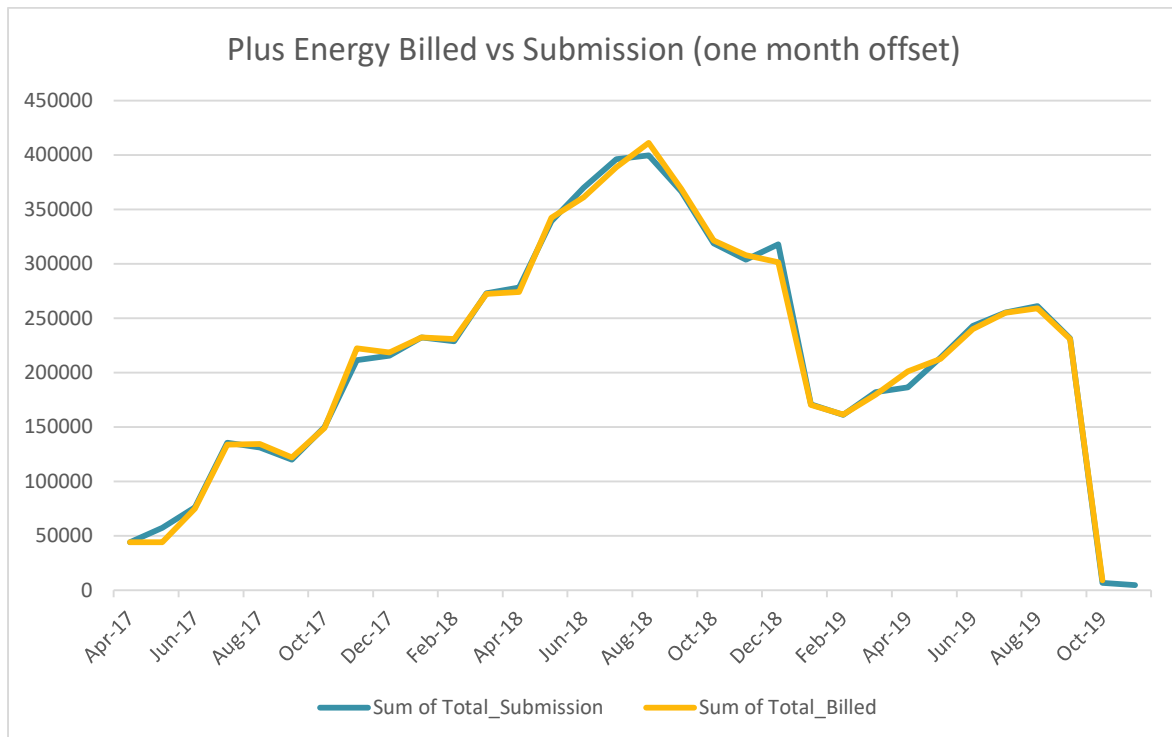
Audit commentary

The process for the calculation of as billed volumes was examined by checking the AV120 submission volumes against billed data for May 2019 to November 2019. The AV120 calculations were confirmed to be correct.

I also checked the difference between submission and electricity supplied information for a 32-month period, and the results are shown in the chart below. The total difference is 11.6% for the year ended November 2019 (billed higher than submission), and 3.1% for the two years ended November 2019 (billed higher than submission).



Due to Plus Energy’s billing cycle, there is a one month offset between billed and submitted consumption. Once the billing and submission periods are aligned, the close relationship between billed and submitted data is visible. The total difference for the aligned data is -0.2% for the year ended October 2019 (billed lower than submission), and 0.2% for the two years ended October 2019 (billed higher than submission). The difference appears reasonable.



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

HHR aggregated and volumes submissions are completed by JC Consulting as an agent.

I confirmed that the process for the calculation and aggregation of HHR data is correct, by matching HHR aggregates data with the HHR volumes data and EIEP3 meter data received from the MEP for November 2019.

The GR090 ICP Missing files were examined for April 2018 to November 2019.

Audit commentary

The HHR aggregates report contains submission information, not electricity supplied information as specified under clause 15.8. Although the reports JC Consulting produces are consistent with the Reconciliation Manager Functional Specification, this is recorded as technical non-compliance below.

I checked the process for aggregation of HHR data is correct, by matching HHR aggregates information to the volumes, and raw EIEP3 files for all ICPs for the November 2019 revision 1 submission. Aggregation was correct.

The GR090 ICP Missing files were examined for April 2018 to November 2019. No ICPs were missing from the registry or aggregates files.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 11.4 With: Clause 15.8 of part 15 From: 01-Apr-19 To: 07-Feb-20	Aggregates file contains submission information. Potential impact: None Actual impact: None Audit history: Once Controls: Strong Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because the aggregates file is correct compared to the functional specification.		
	There is no impact on settlement because the aggregates file is only used for reporting, therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Participant comments I understand that the EA is aware that this is an error in the code and has now been this way since we commenced operations back in April 2017. We are advised this is not something that we as a retailer can fix.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We are advised this is not something that we as a retailer can fix.		28 Feb 2020	

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 adjustment is conducted by JC Consulting in a compliant manner.

Audit commentary

Daylight saving adjustment is conducted by JC Consulting in a compliant manner. I checked HHR volumes files for the beginning (07/04/19) and end (29/09/19) of daylight savings and confirmed that 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

Submissions information is created by JC Consulting as an agent.

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

Audit commentary

No alleged breaches for late provision of submission information occurred during the audit period.

NHH submission processes were reviewed.

- Any ICPs with distributed generation have submission type HHR, and submission was confirmed to be correct in **section 11.4**.

- One ICP with standard unmetered load was supplied for part of the audit period and switched out effective from 01/10/19. I checked the unmetered load submission for the month the ICP switched in and the month the ICP switched out, and confirmed it was calculated accurately.
- Volumes are calculated for all active ICPs, regardless of whether they are vacant or occupied.
- Inactive ICPs continue to be read and have volumes submitted. Consumption during inactive periods is identified during the submission validation process and the registry is updated. No examples of genuine consumption during inactive periods were identified. I found one ICP which was reconnected on switch in where there was a difference between the estimated switch event reading provided by the losing trader and the reconnection reading. All consumption was reported, including the difference between the switch event reading and reconnection reading.

HHR submission was reviewed in **section 11.4**.

Audit outcome

Compliant

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

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

NHH

The process for aggregating the AV080 was examined by checking the total submitted against detailed ICP level information for November 2019. The GR170 to AV080 files for 13 revision submissions were compared, to confirm zeroing occurs.

HHR

HHR aggregation was reviewed in **section 11.4**.

Audit commentary

NHH

The process for aggregating the AV080 was examined by checking the total submitted against detailed ICP level information for November 2019. NHH volume calculation was confirmed to be correct.

GR170 and AV080 files for 13 revision submissions were compared, and found to contain the same NSPs, confirming that zeroing is occurring as required.

Other consumption validation checks are discussed in **section 9.5**.

HHR

HHR aggregation was reviewed in **section 11.4** and found to be compliant.

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

Review of the NSP table confirmed that Plus Energy is not a grid owner.

Audit commentary

Plus Energy is not a grid owner.

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

The registry list and NSP table were reviewed.

Audit commentary

Plus Energy does not own any local or embedded networks and 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

The registry list and NSP table were reviewed.

Audit commentary

Plus Energy is not a grid connected generator.

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

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

Audit observation

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late. Corrections were reviewed in **sections 8.1** and **8.2**.

Audit commentary

Review of submissions confirmed revisions were submitted as expected. Evidence was observed of revised consumption information where changes were made.

As discussed in **section 6.6**, a photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.7 With: Clause 15.12 From: 09-Apr-19 To: 09-Apr-19	A photo reading for 0000681305HB547 on 09/04/19 was treated as an actual reading without being validated against a set of actual readings from another source. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, because customer and photo readings are rarely received, but where they are received, they are treated as validated readings. Photo readings are no longer expected because all ICPs currently supplied have HHR meters. The audit risk rating is low. The incorrectly classified photo reading could have a minor impact on submission if it was found to be incorrect. I viewed the photo and confirmed that the correct reading had been supplied to JC Consulting and entered into the RM tool.		
Actions taken to resolve the issue		Completion date	Remedial action status
This is a repeat of the issue identified in 6.6. above.		28 Feb 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have received instructions from the Auditor to in future use "E" for photo reads and not "RD" unless we have two other sources to validate the photo read.		28 Feb 2020	

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).

The relevant reconciliation participant must, at the earliest opportunity, and no later than the month 14 revision cycle, replace volume information created using estimated readings with volume information created using validated meter readings.

If, despite having used reasonable endeavours for at least 12 months, a reconciliation participant has been unable to obtain a validated meter reading, the reconciliation participant must replace volume information created using an estimated reading with volume information created using a permanent estimate in place of a validated meter reading.

Audit observation

NHH volumes 14-month revisions were reviewed for August to October 2018 to identify any forward estimate still existing.

Audit commentary

HE was 100% for all 14-month revision files reviewed.

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 for each ICP must comprise the following:

- *half hour volume information for the total metered quantity of electricity 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) *any half hour volume information for the ICP; or*
 - b) *any non half hour volumes information calculated under clauses 4 to 6 (as applicable).*
 - c) *unmetered load quantities for each ICP that has unmetered load associated with it derived from the quantity recorded in the registry against the relevant ICP and the number of days in the period, the distributed unmetered load database, or other sources of relevant information (clause 2(1)(c))*
- *to create non half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):*
 - a) *the certification of the control device is recorded in the registry; or*
 - b) *the metering installation in which the control device is location has interim certification.*
- *to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3)):*
 - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
 - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report (clause 2(3)(b)).*

Audit observation

Aggregation and content of reconciliation submissions was reviewed.

Audit commentary

Compliance with this clause was assessed:

- all ICPs have metering category 1 and are submitted as NHH or HHR (HHR submission is only applied where the metering is HHR certified),
- unmetered load submissions were checked in **section 12.2** and found to be correct,
- no profiles requiring a certified control device are used,
- no loss or compensation arrangements are required,
- aggregation of the AV080, AV090 and AV140 reports 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

I reviewed 11 AV080 submissions for revisions 1 to 14, 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 11 AV080 submissions for a diverse sample of months and revisions and confirm that forward and historic estimates are included and identified as such.

Audit outcome

Compliant

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

I reviewed the ICP list for 01/05/19 to 10/12/19 to identify ICPs where the scenarios listed below applied, and then requested submission data and seasonal adjusted daily shape values for the corresponding submissions. I used this information to manually recalculate the submission information and compare it to the RM Tool results.

Audit commentary

The table below shows that all scenarios which occurred during the audit period are calculating as expected and correct SASV (seasonal adjusted shape values) are applied.

Test	Scenario	Test Expectation	Result
a	ICP becomes Active part way through a month	Consumption is only calculated for the Active portion of the month.	Compliant
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Compliant
c	ICP become Inactive then Active again within a month.	Consumption is only calculated for the Active portion of the month.	Compliant
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Compliant
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Has not occurred
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
h	Continuous ICP without a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Compliant
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Compliant
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Compliant
l	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Compliant
m	ICP with a customer read during the month	Customer reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Has not occurred

Test	Scenario	Test Expectation	Result
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Compliant, as long as the photo reading has been validated against a set of validated readings from another source prior to being sent to JC Consulting.
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant

One ICP had a photo reading which was not validated against a set of reading from another source provided for use in the historic estimate process. This is recorded as non-compliance in **section 12.7**. Compliance is recorded in this section because the RM tool's historic estimate calculations were correct, and the issue was caused by an input into the process.

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

The process to create forward estimates was reviewed. Forward estimates were checked for accuracy by analysing the GR170 file for variances between revisions for 18 months.

Audit commentary

The forward estimate process is based on historic consumption or the average daily consumption from the losing trader's CS file is used. As a last resort a forward default estimate can be used.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within $\pm 15\%$ and within $\pm 100,000\text{kWh}$. The target was met for all balancing areas and revisions reviewed.

Quantity of balancing areas with differences over 15% and 100,000 kWh

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
May 2018	0	0	0	0	20
Jun 2018	0	0	0	0	20
Jul 2018	0	0	0	0	20
Aug 2018	0	0	0	0	22
Sep 2018	0	0	0	0	23
Oct 2018	0	0	0		24
Nov 2018	0	0	0		24
Dec 2018	0	0	0		24
Jan 2019	0	0	0		24
Feb 2019	0	0	0		24
Mar 2019	0	0	0		24
Apr 2019	0	0	0		25
May 2019	0	0			25
Jun 2019	0	0			25
Jul 2019	0	0			25
Aug 2019	0	0			25
Sep 2019	0				25
Oct 2019	0				25

The total variation between revisions at an aggregate level is shown below.

Month	Revision 1	Revision 3	Revision 7	Revision 14
May 2018	-0.45%	-0.51%	-1.18%	-1.16%

Month	Revision 1	Revision 3	Revision 7	Revision 14
Jun 2018	0.88%	-0.11%	-1.23%	-1.19%
Jul 2018	0.16%	-1.22%	-1.24%	-1.22%
Aug 2018	0.54%	-0.73%	-0.88%	-0.82%
Sep 2018	0.87%	0.29%	0.32%	0.31%
Oct 2018	0.17%	0.33%	0.61%	
Nov 2018	0.13%	-0.08%	-0.31%	
Dec 2018	-0.19%	-7.55%	-7.25%	
Jan 2019	0.30%	0.57%	2.00%	
Feb 2019	-0.11%	0.07%	1.44%	
Mar 2019	0.09%	2.73%	2.64%	
Apr 2019	1.56%	1.23%	1.60%	
May 2019	-0.29%	-0.45%		
Jun 2019	-0.47%	-0.34%		
Jul 2019	0.08%	-0.06%		
Aug 2019	0.09%	0.04%		
Sep 2019	0.20%			
Oct 2019	123.78%			

I investigated the large percentage difference for October, and found it related to backdated switch outs.

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 registry list for 01/05/19 to 10/12/19 and event detail report for 01/04/19 to 10/12/19 were reviewed to identify any ICPs which have had profile changes.

Audit commentary

No profile changes were identified during the period reviewed.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

For each category 3 of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.

For each category 1 or category 2 metering installation, a reconciliation participant must provide to the reconciliation manager:

- *Half hour submission information; or*
- *Non half hour submission information; or*
- *A combination of half hour submission information and non half hour submission information*

However, a reconciliation participant may instead use a profile if:

- *The reconciliation participant is using a profile approved in accordance with clause Schedule 15.5; and*
- *The approved profile allows the reconciliation participant to provide half hour submission information from a non half hour metering installation; and*
- *The reconciliation participant provides submission information that complies with the requirements set out in the approved profile.*

Half hour submission information provided to the reconciliation manager must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *trading period*

The non half hour submission information that a reconciliation participant submits must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *consumption period or day*

Audit observation

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

Aggregation of NHH volumes is discussed in **section 12.3**, and aggregation of HHR volumes is discussed in **section 11.4**.

Audit commentary

Submission information is provided to the reconciliation manager in the appropriate format and is aggregated to the following level:

- NSP code
- reconciliation type
- profile
- loss category code
- flow direction
- dedicated NSP; and
- consumption period.

NHH volumes and HHR volumes aggregation was confirmed to be compliant.

Audit outcome

Compliant

13.2. Reporting resolution (Clause 9 Schedule 15.3)

Code reference

Clause 9 Schedule 15.3

Code related audit information

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

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

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

Audit observation

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

Audit commentary

Submissions are correctly rounded to two decimal places.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

The timeliness of submissions of historic estimate was reviewed in **section 12.2**. I reviewed 14 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 proportion of HE in the revision files was checked for 14 months, and the table below shows that compliance has been achieved in all instances.

Quantity of NSPs where revision targets were met

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Aug 2018			42	42
Sep 2018			43	43
Oct 2018			44	44
Jan 2019		47		
Feb 2019		47		
Mar 2019	48	48		48
Apr 2019	49	49		49
May 2019	50	50		50
Jun 2019	50			50
Jul 2019		50		50
Sep 2019	50			50

The table below shows that the percentage HE at a summary level for all NSPs is at or above the required targets for all submissions checked.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Aug 2018	-	-	100.00%

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Sep 2018	-	-	100.00%
Oct 2018	-	-	100.00%
Jan 2019	-	100.00%	-
Feb 2019	-	100.00%	-
Mar 2019	99.76%	100.00%	-
Apr 2019	99.97%	100.00%	-
May 2019	99.96%	100.00%	-
Jun 2019	100.00%	-	-
Jul 2019	-	99.95%	-
Sep 2019	100.00%	-	-

Audit outcome

Compliant

CONCLUSION

Following a period of high wholesale electricity spot prices, the majority of Plus Energy's customers were switched to a gentailer. Plus Energy currently supplies 15 meter category 1 ICPs, which are settled as NHH or HHR.

Plus Energy engages JC Consulting for the performance of submission activities. All of the relevant tasks conducted by JC consulting were audited as part of this audit.

Eleven non-compliances were identified, each affecting a small number of ICPs or events. Because non-compliance must be recorded in every report section which applies to a non-compliant ICP or event, the audit risk rating score becomes inflated. For example, one photo reading which was treated as actual without being validated against a set of readings from another source was recorded as non-compliance in three sections.

The key areas that require some improvement are:

1. **CS content:** CS files are created manually, and some errors were identified during periods where large numbers of ICPs were switching out to Plus Energy's gentailer. It is expected that accuracy will improve with lower volumes, and Plus Energy intends to resolve the issues identified.
2. **Photo read validation:** photo readings should only be treated as validated actual readings where they have been validated by a set of readings from another source. Plus Energy intends to treat unvalidated photo reads as estimates in the future.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of 17, which results in an indicative audit frequency of 12 months. The issues identified were generally minor and affected a very small number of ICPs. In some cases an issue affecting one ICP caused non-compliance in several report sections which inflated the total audit risk rating score.

Considering this result along with the fact that all issues have a low audit risk rating and the small number of ICPs currently supplied, I recommend that the next audit is due in 24 months on 01/03/2022.

PARTICIPANT RESPONSE

Plus Energy have reviewed this report and their comments are contained within its body.