

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT

VERITEK

For

PLUS ENERGY LIMITED TRADING AS
COMMUNITY POWER
NZBN: 9429043403363

Prepared by: Tara Gannon

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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 26 active meter category 1 ICPs, which are settled as NHH. All active HHR ICPs switched out effective 1 December 2020.

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

18 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, three CS files which contained incorrect actual readings appear as non-compliance in five sections.

The main area which requires improvement is CS accuracy. CS files are created manually, and a small number of errors were identified. Plus Energy changed their process to calculate average daily kWh to match the Registry Functional Specification which is expected to result in an immediate improvement in compliance.

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 24, which results in an indicative audit frequency of 12 months. The issues identified were generally minor and affected a very small number of ICPs. Considering that Plus Energy has taken action prevent recurrence of the non-compliances, all issues have a low audit risk rating, and a small number of ICPs are affected by the non-compliances and currently supplied, I recommend that the next audit is due in a minimum of 18 months on 01/08/2023.

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
Relevant information	2.1	10.6, 11.2, 15.2	Two registry data inaccuracies were not resolved as soon as practicable.	Strong	Low	1	Identified
Arrangements for metering equipment provision	2.13	10.36	Arrangements were not in place with the MEPs for three ICPs. Two of the ICPs have since undergone MEP switches.	Moderate	Low	2	Identified
Provision of information on dispute resolution scheme	2.19	11.30A	Information on Utilities Disputes is provided in response to inbound calls only where the call relates to a complaint or dispute but should be provided when responding to all customer enquiries.	Moderate	Low	2	Identified
Provision of information on electricity plan comparison site	2.20	11.30B	Information on Powerswitch was temporarily missing from Plus Energy's website.	Strong	Low	1	Cleared
Changes to registry information	3.3	10 Schedule 11.1	Three late status updates to active.	Moderate	Low	2	Identified
Provision of information to the registry manager	3.5	9 Schedule 11.1	ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20.	Strong	Low	1	Identified
ANZSIC codes	3.6	9 (1)(k) of Schedule 11.1	0000062299CP0DC which is a water supply pump which has the S953 (other personal services) code applied instead of D281100 (water supply). The code was corrected during the audit.	Strong	Low	1	Cleared

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Management of "active" status	3.8	17 Schedule 11.1	ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. ICP 0240230479LCC08 was recorded as active on 16/12/20 but should have had inactive status.	Strong	Low	1	Identified
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	Three transfer CS files contained incorrect average daily kWh.	Strong	Low	1	Identified
Losing trader provides information - switch move	4.8	10(1) Schedule 11.1	Two E2 breaches.	Strong	Low	1	Identified
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	Seven switch move CS files contained incorrect average daily kWh. Four switch move CS files contained incorrect last actual read dates. Three switch move CS files contained incorrect switch event readings.	Moderate	Low	2	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	Two incorrect withdrawal reason codes were applied.	Strong	Low	1	Identified
Metering information	4.16	21 Schedule 11.3	Three switch move CS files did not contain the actual reading or best estimate of consumption on Plus Energy's last day of supply.	Moderate	Low	2	Identified
NHH meter reading application	6.7	6 Schedule 15.2	Three switch move CS files did not contain the actual reading or best estimate of consumption on Plus	Moderate	Low	2	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			Energy's last day of supply.				
Identification of readings	9.1	3(3) Schedule 15.2	An incorrect switch event read and read type was recorded in the CS file for ICP 0000812235TUC6D 29/06/21.	Moderate	Low	2	Identified
Accuracy of submission information	12.7	15.12	Three switch move CS files did not contain the actual reading or best estimate of consumption on Plus Energy's last day of supply, which resulted in under or over submission relative to the correct value.	Strong	Low	1	Identified
Accuracy of submission information	13.3	10 Schedule 15.3	The 3-month historic estimate threshold was not met for one NSP each for three submissions.	Strong	Low	1	Identified
Future Risk Rating						24	

Future risk rating	0	1-3	4-15	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.
Electricity supplied information provision to the reconciliation manager	11.2	Reconcile AV120 to raw billed data	Validate the AV120 against the raw billed data at NSP level to ensure that report aggregation is correct.

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

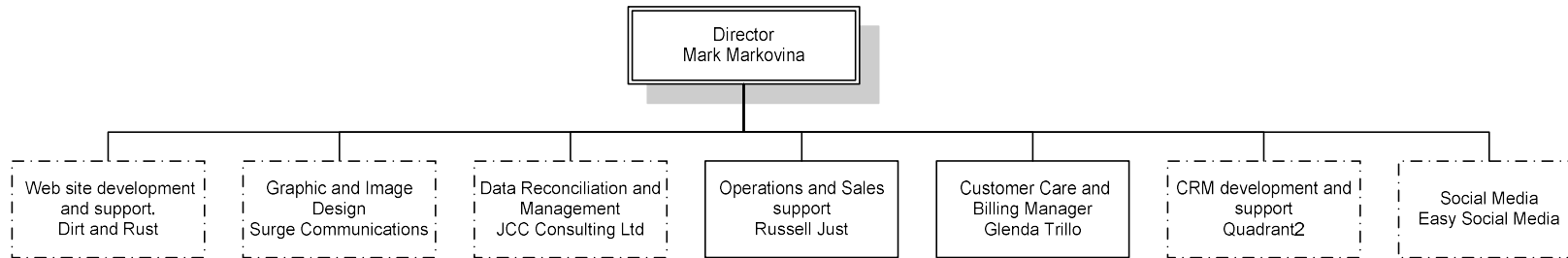
Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

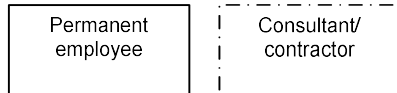
There are no exemptions in place that are relevant to the scope of this audit.

1.2. Structure of Organisation

Plus Energy provided a copy of their structure as at December 2021.



Note:



1.3. Persons involved in this audit

Auditors:

Name	Role	Company
Rebecca Elliot	Lead Auditor	Veritek Limited
Tara Gannon	Supporting Auditor	Veritek Limited

Plus Energy personnel assisting with this audit:

Name	Title	Company
Russell Just	Operations and Sales Support	Plus Energy
John Candy	Director	John Candy 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 John Candy Consulting for the performance of submission activities. All of the relevant tasks conducted by John Candy Consulting were audited as part of this audit.

Plus Energy engages Wells to conduct NHH manual data collection. The last data collection by Wells during the audit period occurred prior to the completion of their 2021 agent audit. ICP 0006560414HB35D has recently been added to a Wells meter reading round.

1.5. Hardware and Software

Plus Energy

The CRM interfaces with the registry to collect data, and registry population is conducted manually. Access to systems is restricted through logins and passwords.

Plus Energy's systems are cloud based, with cloud based back up.

John Candy Consulting

The Access Database (RM Tool) is provided and run by John Candy Consulting, along with Windows 10 and Microsoft Excel. Online backups are made to OneDrive. Copies of files are also retained in dropbox which is shared with Plus Energy.

Access to systems is restricted using logins and passwords.

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	Nov 2021	Dec 2019	Jan 2019	2018
1	26	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 (Nov 2021)	Number of ICPs (Dec 2019)	Number of ICPs (Jan 2019)	Number of ICPs (2018)
Active (2,0)	26	15	118	118
Inactive – new connection in progress (1,12)	-	-	1	1
Inactive – electrically disconnected vacant property (1,4)	1	1	-	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	1	-	-	-
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)	3	2	-	-
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1.8. Authorisation Received

Plus Energy provided authorisation via email.

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.

The audit analysis was conducted on:

- a registry list and event detail report for 1 March 2020 to 10 November 2021,
- a registry list and meter event detail report for 10 November 2021, and
- an audit compliance report for 1 December 2020 to 10 November 2021.

The table below shows the tasks under clause 15.38 of part 15 for which Plus Energy requires certification. Some or part of the functions Plus Energy is certified for are conducted by agents, as shown in the table below.

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	John Candy Consulting	
(d)(i) – Calculation of ICP days	John Candy Consulting	
(d)(ii) - delivery of electricity supplied information under clause 15.7	John Candy Consulting	
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	John Candy Consulting	

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing Data
(e) – Provision of submission information for reconciliation	John Candy Consulting	

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

All current Plus Energy ICPs have category 1 HHR metering installed and receive electronic readings from the MEP. The last data collection by Wells occurred prior to the completion of their 2021 agent audit, and ICP 0006560414HB35D has recently been added to a Wells meter reading round.

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 February 2020 by Tara Gannon 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
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.	Still existing
Provision of information to the registry manager	3.5	9 Schedule 11.1	One late status update to active for a new connection.	Still existing
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.	Cleared
Losing trader must provide final information - switch move Metering information Derivation of meter readings	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.	Still existing

Subject	Section	Clause	Non-compliance	Status
	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.	Still existing
	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.	Cleared
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.	Still existing
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.	Still existing
HHR aggregates information provision to the reconciliation manager	11.4	15.8	Aggregates file contains submission information.	Still existing
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.	Still existing

Subject	Section	Description	Recommendation	Status
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	Not adopted

Subject	Section	Description	Recommendation	Status
			ICPs, a monthly check of the event data provided should be sufficient.	

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 processes to find and correct incorrect information was examined. The registry validation processes were examined in detail in relation to the achievement of this requirement.

The registry list and AC020 reports were examined to identify any registry discrepancies, and to confirm that all information was correct and not misleading.

Audit commentary

Registry and static data accuracy

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.

Registry validation is completed weekly by John Candy 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 John Candy 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	Nov 2021	Dec 2019	Comments
1	Status or status date mismatch between registry and Plus Energy	2	-	ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. Refer to sections 3.5 and 3.8 . ICP 0240230479LCC08 was recorded as active on 16/12/20 but should have had inactive status.

Item No.	Issue	Nov 2021	Dec 2019	Comments
2	Active ICPs with blank MEP and no MEP nominated and UML = N	-	-	Compliant.
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	-	-	Compliant. No active ICPs have distributed generation indicated.
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	1	ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. 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.

Read and volume data accuracy

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

Defective meters	<p>Defective meters are typically identified through the meter reading validation process, or from information provided by the meter read provider. Estimated consumption for the defective period is calculated from consumption before the defect or on the replacement meter and entered against a dummy meter register for inclusion in submission information.</p> <p>No defective meters were identified during the audit period.</p>
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Bridged meters	<p>Bridged meters will be identified through review of returned reconnection paperwork, or the meter reading validation process. Estimated consumption for the bridged period is calculated from consumption before or after bridging and entered against a dummy meter register for inclusion in submission information.</p> <p>No bridged meters were identified during the audit period.</p>
Consumption while inactive	<p>Inactive ICPs with consumption are identified through the NHH read validation process discussed in section 9.5, and John Candy Consulting's pre submission checks. The registry status records are corrected to active for the affected period, and all consumption is submitted. If it is not possible to change the status to active, permanent estimates will be applied to force the consumption into an active period.</p> <p>No examples of genuine consumption during inactive periods were identified, which appears reasonable as only three ICPs have inactive status.</p> <p>ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. I checked the submission data for the read to read period covering the reconnection and confirmed that all consumption was reported.</p>
Consumption while vacant	All vacant consumption is captured and reported, and there were no vacant ICPs during the audit period.
Incorrect multipliers	No incorrect multipliers were identified during the audit period, and there have been no multiplier corrections.
Unmetered load corrections	No unmetered load is supplied and no unmetered load corrections occurred during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 2.1</p> <p>With: Clause 10.6, 11.2, 15.2</p> <p>From: 07-Sep-20</p> <p>To: 16-Dec-20</p>	<p>Two registry data inaccuracies were not resolved as soon as practicable:</p> <ul style="list-style-type: none"> ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. ICP 0240230479LCC08 was recorded as active on 16/12/20 but should have had inactive status. <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are rated as strong because the exceptions appear isolated, and one reconnection was complicated by multiple requests and turn downs.</p> <p>The audit risk rating is low because there was a one day difference in both cases.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
No action required		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Refresher training has been provided	22/02/2022	

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

During the audit period, Plus Energy has received readings from AMS, Arc, FCLM, Metrix and Smartco as MEPs, and Wells as an agent. For currently active ICPs, Plus Energy receives readings from AMS, FCLM, Metrix, and Smartco. ICP 0006560414HB35D has recently been added to a Wells meter reading round, all other ICPs have AMI or HHR metering and reads are provided by the MEP.

To confirm the process I traced:

- readings for active NHH ICPs supplied in October 2021 from the source files to the RM tool and submission information.
- volumes for all HHR ICPs supplied in November 2020 (the last HHR submissions provided) from the source files to the HHR aggregated submission to confirm the process.

Audit commentary

Read files are sent directly to John Candy Consulting by the MEPs and agents. Data transmissions are via SFTP, which ensures the security and integrity of the data. Switch event readings are obtained directly from the registry by John Candy Consulting.

Customer readings are entered into a spreadsheet and sent to John Candy via email. If Plus Energy finds a reading is incorrect through their validation process, John Candy Consulting is advised by email.

I traced a diverse sample of NHH readings for the 23 active ICPs which received readings in October 2021 from the source files to the RM Tool and submission information, and found the readings matched the source files exactly.

I traced the raw data received from the MEP to the HHR aggregates file for all six ICPs on the November 2020 initial, revision one, and revision three submissions. All periods which had volumes provided matched exactly to the MEP data, and compensation factors were correctly applied.

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:

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

Audit observation

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 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 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 processes were examined in detail to evaluate the strength of controls, and the registry list, audit compliance, and switch breach history reports were examined to confirm process compliance.

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 for ICP 0000572080NR132 on 8 September 2020. The ICP was claimed at 1,12 (inactive new connection in progress status) and an MEP nomination was issued and accepted prior to initial electrical connection. The status update to active occurred on time, the morning after the ICP became active.

All of Plus Energy's active ICPs have an MEP recorded and metering category 1. No unmetered load has been recorded by the distributor or Plus Energy.

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 trader 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:*
 - o *the trader is recorded in the registry as the trader responsible for the ICP or has an arrangement with the customer and initiates a switch within 2 business days of electrical connection*
 - o *if the ICP has metered load, 1 or more certified metering installations are in place*
 - o *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 for ICP 0000572080NR132 on 8 September 2020. The meter was certified the day before the initial electrical connection date. Plus Energy was recorded as the trader on the registry, a MEP nomination had been accepted, and compliant metering was installed.

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:
 - o the trader is recorded in the registry as the trader responsible for the ICP or has an arrangement with the customer and initiates a switch within 2 business days of electrical connection
 - o if the ICP has metered load, 1 or more certified metering installations are in place
 - o if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the electrical connection.

Audit observation

The new connection process was examined in detail to evaluate the strength of controls. The AC020 report was examined to confirm process compliance and that controls are functioning as expected.

Audit commentary

Active ICPs without metering

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

New Connections

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

Reconnections

According to the AC020 report ICP 0240230479LCC08 had expired certification on reconnection on 16 December 2020. I found that the ICP had not been successfully reconnected, and compliance is recorded in this section. Non-compliance is recorded in **section 3.8** in relation to the incorrect active status event.

Bridged meters

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, except for TRUM and CTCT. A small number of ICPs have had TRUM or CTCT as an MEP during the audit period:

- ICP 0000208698DE2C4 had TRUM as an MEP from 25 January 2021 until 9 February 2021,
- ICP 0013540465ELFOE had CTCT as an MEP from 24 November 2020 until 7 July 2021, and
- ICP 0006560414HB35D has had CTCT as an MEP from 24 July 2021 onwards.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.13 With: Clause 10.36 From: 24-Nov-20 To: 09-Feb-22	Arrangements were not in place with the MEPs for three ICPs. Two of the ICPs have since undergone MEP switches. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	The controls are rated as strong and the risk is low. Arrangements are in place for most ICPs. A small number of ICPs are affected, and two of the ICPs have since undergone MEP changes.

Actions taken to resolve the issue	Completion date	Remedial action status
<p>We very really come across a TRUM meter as we cannot compete with Trustpower’s cross subsidisation of consumers through their local trust dividend which is only payable to a consumer if they stay with Trustpower. When we do, we typically switch that consumers ICP to our supply provider and we trade the ICP through them (as a Tier 2 retailer) therefore the ICP is not being traded by us so we have no requirement for an MEP agreement with TRUM. This means we are typically the “Trader” of the ICP for just one day as we can’t switch the ICP to our provider on the same day we acquire it, the registry does not allow this, so we have to switch it one day later. Alternatively, if we were to trade the ICP we would swap the meter out for one from our preferred MEP.</p> <p>For CTCT meters, we typically switch that consumers ICP to our supply provider and we trade the ICP through them (as a Tier 2 retailer) therefore the ICP is not being traded by us so we have no requirement for an MEP agreement with CTCT. This means we are typically the “Trader” of the ICP for just one day as we can’t switch the ICP to our provider on the same day we acquire it, the registry does not allow this, so we must switch it one day later. Alternatively, if we were to trade the ICP we would swap the meter out for one from our preferred MEP.</p> <p>For ICP 0006560414HB35D we endeavored to have this legacy non communicating meter replaced with a smart meter from our preferred MEP. However, it has been discovered that this is a “check meter” located on a meter board with other “check meters” and that there is no room on the meter board to upgrade this to a smart, communicating meter. We are not receiving any services from the MEP for this meter, they provide no reads, so we have had to arrange for this meter to be read manually, at our cost. We will request an MEP agreement from CTCT for this meter, if we are unable to enter into an agreement with CTCT we will switch this ICP to our supply provider.</p>	<p>Meter replaced 10/2/2022</p> <p>Meter replaced 8/7/2021</p> <p>Attempting to obtain an MEP agreement with CTCT. Request sent 27/2/2022</p>	<p>Identified</p>
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p>Have applied for an MEP agreement with CTCT.</p>	<p>27/02/2022</p>	

2.14. Connecting ICPs then withdrawing switch (Clause 10.33A(5))

Code reference

Clause 10.33B

Code related audit information

If a trader connects an ICP it is in the process of switching and the switch does not proceed or is withdrawn the trader must:

- *restore the disconnection, including removing any bypass and disconnecting using the same method the losing trader used*

- *reimburse the losing trader for any direct costs incurred*

Audit observation

The process for reconnecting ICPs in the process of switching in was examined.

I matched reconnections to withdrawal acknowledgements to identify ICPs which had been reconnected and then undergone a withdrawal and checked compliance.

Audit commentary

If an ICP was reconnected as part of the switching process and the switch was later withdrawn, Plus Energy would restore the disconnection and reimburse the losing trader for any direct costs incurred if requested.

I checked all four ICPs which were reconnected and also had a withdrawal processed during the audit period. Plus Energy was the trader at the time of reconnection for all four ICPs.

Audit outcome

Compliant

2.15. Electrical disconnection of ICPs (Clause 10.33B)

Code reference

Clause 10.33B

Code related audit information

Unless the trader is recorded in the registry or is meeting its obligation under 10.33A(5) it must not disconnect or electrically disconnect the ICP, or authorise the metering equipment provider to disconnect or electrically disconnect the ICP.

Audit observation

The disconnection process was examined. Traders are only able to update ICP status for event dates where they are responsible for the ICP on the registry.

Audit commentary

I checked all ICPs disconnected during the audit period which had an NT issued by another trader. In all cases the disconnection occurred during Plus Energy's period of supply at least 81 business days before the NT event date and receipt date.

Audit outcome

Compliant

2.16. Removal or breakage of seals (Clause 48(1C), 48 (1D), 48 (1E), 48 (1F) of Schedule 10.7)

Code reference

Clause 48(1C), 48 (1D), 48 (1E), 48 (1F) of Schedule 10.7

Code related audit information

A trader can remove or break a seal without authorisation from the MEP to:

- *reset a load control switch, bridge or unbridge a load control switch – if the load control switch does not control a time block meter channel*
- *electrically connect load or generation, of the load or generation has been disconnected at the meter*

- *electrically disconnect load or generation, if the trader has exhausted all other appropriate methods of electrical disconnection*
- *bridge the meter*

A trader that removes or breaks a seal in this way must:

- *ensure personnel are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code*
- *replace the seal with its own seal*
- *have a process for tracing the new seal to the personnel*
- *update the registry (if the profile code has changed)*
- *notify the metering equipment provider.*

Audit observation

Policies and processes for removal and breakage of seals were reviewed.

A sample of disconnections and reconnections were checked for compliance. There were no additions of export metering, and no bridged meters.

Audit commentary

Plus Energy does not remove or break seals, work is completed by Wells. If seals were found to be missing or broken a service request would be raised to re-seal the meter. No incidences of missing or broken seals were identified during the audit period.

Plus Energy has agreements in place with MEPs and Wells, who are required to ensure that only qualified personnel perform work and manage and trace seals. MEPs and Wells do not usually provide details of seals in their job completion paperwork, but can add a manual note on the work completion paperwork. Plus Energy uses the returned paperwork to confirm the correct ICP attributes including status and profile, and update their system and the registry.

I checked a sample of six disconnections and ten reconnections and found that where disconnection or reconnection was initiated, the MEP was advised or remote disconnection or reconnection had occurred. No ICPs had distributed generation added during the audit period, and no meters were bridged.

Audit outcome

Compliant

2.17. Meter bridging (Clause 10.33C and 2A of Schedule 15.2)

Code reference

Clause 10.33C and 2A of Schedule 15.2

Code related audit information

A trader, or a distributor or MEP which has been authorised by the trader, may only electrically connect an ICP in a way that bypasses a meter that is in place (“bridging”) if, despite best endeavours:

- *the MEP is unable to remotely electrically connect the ICP*
- *the MEP cannot repair a fault with the meter due to safety concerns*
- *the consumer will likely be without electricity for a period which would cause significant disadvantage to the consumer*

If the trader bridges a meter, the trader must:

- *determine the quantity of electricity conveyed through the ICP for the period of time the meter was bridged*

- *submit that estimated quantity of electricity to the reconciliation manager*
- *within 1 business day of being advised that the meter is bridged, notify the MEP that they are required to reinstate the meter so that all electricity flows through a certified metering installation.*

The trader must determine meter readings as follows:

- *by substituting data from an installed check meter or data storage device*
- *if a check meter or data storage device is not installed, by using half hour data from another period where the trader considers the pattern of consumption is materially similar to the period during which the meter was bridged*
- *if half hour data is not available, a non half hour estimated reading that the trader considers is the best estimate during the bridging period must be used.*

Audit observation

The process for bridging meters was discussed and bridged meters were reviewed.

Audit commentary

Meters would only be bridged if they cannot be reconnected without bridging, and delaying reconnection would cause significant disadvantage to the customer.

No meters were bridged during the audit period. Bridged meters would be identified through the read validation process, or reconnection paperwork returned from the contractor.

Audit outcome

Compliant

2.18. Use of ICP identifiers on invoices (Clause 11.30)

Code reference

Clause 11.30

Code related audit information

Each trader must ensure the relevant ICP identifier is printed on every invoice or document relating to the sale of electricity.

Audit observation

A sample of invoices and letter templates relating to invoicing were reviewed to confirm that the ICP number is present.

Audit commentary

ICP numbers are included in communications relating to the sale of electricity.

Audit outcome

Compliant

2.19. Provision of information on dispute resolution scheme (Clause 11.30A)

Code reference

Clause 11.30A

Code related audit information

A retailer must provide clear and prominent information about Utilities Disputes:

- on their website
- when responding to queries from consumers
- in directed outbound communications to consumers about electricity services and bills.

If there are a series of related communications between the retailer and consumer, the retailer needs to provide this information in at least one communication in that series.

Audit observation

The process to ensure that information on Utilities Disputes is provided to customers was discussed. A sample of invoices, letter templates, emails, messenger correspondence, and recorded greetings for inbound calls were reviewed to determine whether clear and prominent information on Utilities Disputes is provided.

Audit commentary

Clear and prominent information on Utilities Disputes is provided:

- on invoices,
- on their website under <https://communitypower.co.nz/account-enquiries/complaint-resolution/>,
- as part of the footer on all outbound emails sent from support@communitypower.co.nz, and
- as part of the terms and conditions under 17.4 Referring your dispute to Utilities Disputes.

Information on Utilities Disputes is provided for inbound calls relating to complaints or disputes, but is not routinely provided for all calls.

Most outbound communications to customers regarding electricity services and bills are by email, and customers receive information on Utilities Disputes as part of the email footer.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.19 With: Clause 11.30A From: 30-Dec-20 To: 09-Feb-22	Information on Utilities Disputes is provided in response to inbound calls only where the call relates to a complaint or dispute but should be provided when responding to all customer enquiries. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	The controls are rated as moderate because information on Utilities Disputes is provided when responding to customer enquiries in most circumstances. The risk is low because Utilities Disputes information is provided where a customer phones regarding a complaint or dispute.

Actions taken to resolve the issue	Completion date	Remedial action status
<p>Consumers should not have to be advised of a dispute resolution process when they are not calling about a dispute. We find this creates further conversation, extending the call time, taking valuable time from both the consumer and out staff, potentially leading to delays in servicing the next consumer, and creates confusion for the consumer as they don't understand why they are being told this when it has nothing to do with their call. We understand the intent is to raise the awareness of the dispute resolution service, we do this at least 12 times every year with advice of the disputes resolution service being included in the consumers monthly invoicing email and in any other email sent to a consumer as a result of an enquiry.</p>		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>We typically email a consumer after any inbound call to confirm any action taken or arrangements made and the advice about disputes resolution is included in this email. We participated in a group zoom session with the EA when the consumer advice about dispute resolution was being designed and implemented and it was agreed then that a follow up email as outlined above is acceptable.</p>	Already in place	

2.20. Provision of information on electricity plan comparison site (Clause 11.30B)

Code reference

Clause 11.30B

Code related audit information

A retailer that trades at an ICP recorded on the registry must provide clear and prominent information about Powerswitch:

- *on their website*
- *in outbound communications to residential consumers about price and service changes*
- *to residential consumers on an annual basis*
- *in directed outbound communications about the consumer's bill.*

If there are a series of related communications between the retailer and consumer, the retailer needs to provide this information in at least one communication in that series.

Audit observation

The process to ensure that information on Powerswitch is provided to customers was discussed. A sample of invoices, letter templates and emails were reviewed to determine whether clear and prominent information on Powerswitch is provided.

Audit commentary

Clear and prominent information on Powerswitch is provided:

- as part of the footer on outbound emails,
- as part of the footer on all outbound emails sent from support@communitypower.co.nz, and
- on their website under <https://communitypower.co.nz/account-enquiries>.

Powerswitch information was temporarily missing from the website from 14 January 2022 until it was reinstated on 15 January 2022.

Invoices, and most outbound communications to customers regarding price and service changes are by email. The annual notification requirement is met through the monthly invoice email, which contains information on Powerswitch.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.20 With: Clause 11.30B From: 14-Jan-221 To: 15-Jan-22	Information on Powerswitch was temporarily missing from Plus Energy’s website. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are strong and the risk is low because the information was only temporarily missing.		
Actions taken to resolve the issue		Completion date	Remedial action status
Information on Powerswitch had been “dropped” from our site, this has now been restored		15/1/2022	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
I.T. advise this was a “one off” and is not expected to occur again.		15/1/2022	

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 during the audit period, 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 processes were examined in detail to evaluate the strength of controls, and the registry list and audit compliance reports were examined to confirm process compliance. Late updates to active for new connections are discussed in **section 3.5**.

Audit commentary

The new connection processes are detailed in **section 2.9** above. One new connection was completed during the audit period, and trader required 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 MEP nominations and trader updates was discussed.

The AC020 reports for each code were reviewed. A sample of late status updates, trader updates and MEP nominations were checked as described in the audit commentary.

Audit commentary

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
	Nov 2021	3	89.29%	2.46

The late updates were caused by backdated switch completion (where the status could not be updated until the switch was completed), delays in confirming whether the reconnection had been completed, and corrections. The late updates were accurately processed from the correct event date, apart from

ICP 0240230479LCC08 which was updated to active status from 16 December 2021 although the reconnection was unsuccessful. This is recorded as non-compliance in **section 3.8**.

The timeliness of status updates to inactive is set out on the table below. No late updates occurred.

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
	Nov 2021	-	100%	1

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. No late updates occurred, and no late ANZSIC code updates for new or switched in ICPs were identified on the AC020 report.

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
Nov 2021	-	100%	0.00

I checked the accuracy of a sample of 17 trader updates and confirmed they were correct.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 30-Dec-20 To: 18-Aug-21	Three late status updates to active. Potential impact: Low Actual impact: Low Audit history: Once 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.</p> <p>The risk is low as most updates were completed on time or soon after they were due. On average it took 2.46 business days to complete an active status update and the latest update was made ten business days after the event date.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Refresher training completed		21/2/2022	

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

The new connection, MEP nomination and decommissioning processes were reviewed, and the registry list and audit compliance reports were examined to confirm process compliance.

A sample of MEP nomination rejections and decommissioned ICPs were examined.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection process is discussed in detail in **section 2.9**. 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 event detail 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.

ICP 0000295539MPADC was decommissioned during the audit period because it was dismantled. Actual HHR readings were received on the last day of supply, and the MEP was advised of decommissioning via a registry notification before the decommissioning date.

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 processes were examined in detail to evaluate the strength of controls, and the registry list and audit compliance reports were examined to confirm process compliance.

Audit commentary

New connection information timeliness

The new connection process is described in detail in **section 2.9**. MEP nomination occurs when the ICP is at 1,12 (inactive new connection in progress) status as part of the service request process. The AC020 report did not record any late updates to 1,12 status.

The timeliness of status updates to active for new connections is set out on the table below. No new connections were completed during the AC020 report period (1 December 2020 to 10 November 2021).

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
Nov 2021	-	-	-

One new connection was completed during the audit period for ICP 0000572080NR132 on 8 September 2020. Prior to initial electrical connection Plus Energy was recorded as the trader on the registry, a MEP nomination had been accepted, and compliant metering was installed. The status update to active was made on time.

New connection information accuracy

The AC020 report did not record any ICPs with initial electrical connection dates where the status was not active, or inconsistencies between the active status date, initial electrical connection date and meter certification date.

I checked the date consistency for the one new connection which occurred during the audit period. The paperwork date was accidentally entered instead of the work completion date.

ICP	Status Event Date	Initial Electrically Connected Date	Meter cert date	Correct status date
0000572080NR132	08/09/2020	07/09/2020	07/09/2020	07/09/2020

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: 07-Sep-20 To: 08-Sep-20	ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong. The incorrect date was an isolated data entry error. The audit risk rating is low because there was a one day difference.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Refresher training completed		21/02/2022	

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 and AC020 reports were reviewed and ANZSIC codes were checked for all ICPs to determine compliance.

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 apart from 0000062299CP0DC which is a water supply pump and had the S953 (other personal services) code applied instead of D281100 (water supply). The code was corrected during the audit.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 3.6 With: 9 (1)(k) of Schedule 11.1 From: 01-Apr-21 To: 14-Jan-22	0000062299CP0DC which is a water supply pump which has the S953 (other personal services) code applied instead of D281100 (water supply). The code was corrected during the audit. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1	
Audit risk rating	Rationale for audit risk rating	
Low	The controls are rated as strong and the risk is low because only one exception was identified, and it was corrected during the audit. There is no impact on settlement outcomes from incorrect ANZSIC codes but there is a low impact on the Electricity Authority's reporting accuracy, therefore the audit risk rating is low.	
Actions taken to resolve the issue	Completion date	Remedial action status
Retained the ANSIC code of the losing retailer as couldn't locate anything more appropriate at that time.		Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	
Has been corrected	15/01/2022	

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 and AC020 report 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 John Candy Consulting weekly and referred to Plus Energy to confirm the correct trader values.

All of Plus Energy's active ICPs have an MEP recorded and metering category 1.

ICP 0013540465ELF0E was supplied with metered and unmetered load from 24 November 2020 until 30 September 2021, and the trader and distributor unmetered load details matched exactly. I checked six months of submission information and confirmed that the unmetered load was reported correctly. No other ICPs had unmetered load details recorded by the trader or distributor.

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

Audit observation

The new connection process was examined in detail as discussed in **sections 2.9** and **3.5**.

For new connections which had been electrically connected during the audit period, the initial electrical connection date, earliest active date, and meter certification date were compared to determine the accuracy of the connection dates.

The reconnection process was examined using the AC020 and event detail reports. The timeliness of data for reconnections is assessed in **section 3.3**, and a sample of ten updates were checked for accuracy.

Audit commentary

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

Review of the registry list confirmed that all active ICPs are metered and 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.

New connection information accuracy

The AC020 report did not record any ICPs with initial electrical connection dates where the status was not active, or inconsistencies between the active status date, initial electrical connection date and meter certification date.

I checked the date consistency for the one new connection which occurred during the audit period. The paperwork date was accidentally entered instead of the work completion date.

ICP	Status Event Date	Initial Electrically Connected Date	Meter cert date	Correct status date
0000572080NR132	08/09/2020	07/09/2020	07/09/2020	07/09/2020

Reconnection information accuracy

A sample of ten reconnections were checked, and I confirmed that the correct status and date had been applied except for ICP 0240230479LCC08 which was updated to active status from 16 December 2020 although the reconnection was unsuccessful. There was confusion over whether the ICP had been reconnected because the reconnection was unable to be completed remotely and several requests for reconnection were issued following turn downs. The ICP incorrectly had active status for one day before switching out.

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

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 3.8 With: Clause 17 Schedule 11.1 From: 07-Sep-20 To: 16-Dec-20	ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. ICP 0240230479LCC08 was recorded as active on 16/12/20 but should have had inactive status. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1	
Audit risk rating	Rationale for audit risk rating	
Low	The controls are rated as strong because the exceptions appear isolated, and one reconnection was complicated by multiple requests and turn downs. The audit risk rating is low because there was a one day difference in both cases.	
Actions taken to resolve the issue	Completion date	Remedial action status
No action required		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Refresher training completed	21/02/2022	

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 disconnection process was examined using the AC020 and event detail reports. The timeliness of data for disconnections is assessed in **section 3.3**, and a sample of updates were checked for accuracy.

The registry list file was examined to identify any ICPs that had been at the “inactive - new connection in progress” for more than 24 months.

The AC020 report did not record any late updates to inactive status.

Audit commentary

Plus Energy processes all status updates manually on the registry once paperwork is received. No late updates to inactive status were identified.

All six active disconnection status records on the event detail report were checked and I confirmed that the correct status and date had been applied. No ICPs are currently at “inactive new connection in progress” status, and no examples of consumption during inactive periods were identified.

ICP 0000572080NR132 was recorded as active from 08/09/20 but should have been active from 07/09/20. I checked the submission data for the read to read period covering the reconnection and confirmed that all consumption was reported. The incorrect status date is recorded as non-compliance in **sections 2.1** and **3.8**.

The AC020 report identified one ICP which had been recorded as AMI-remote disconnection without the AMI flag set to yes. The ICP switched in after being disconnected by another trader, and the AMI flag was set to yes at the time of disconnection.

No examples of genuine consumption during inactive periods were identified.

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 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and 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 48 transfer switch NTs were issued. All had metering category 1 or 2. 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 3 business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12 month period, at least 50% of the event dates must be no more than 5 business days after the date of notification. The losing trader must then:

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

When establishing an event date for clause 4, the losing trader 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 2 months.

Audit observation

The event detail report was reviewed to identify all AN files and the switch breach history report was reviewed.

Audit commentary

No AN files were issued for transfer switches, and the switch breach history report did not record any late AN files.

Audit outcome

Compliant

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

If the losing trader provides information to the registry 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 was 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 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 were checked to determine whether the average daily consumption was correct.

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.

Audit commentary

CS timeliness

Plus Energy uses the switch breach report to identify files which are due. The switch breach history report did not record any late CS files for transfer switches.

CS content

CS files are created manually on the registry.

The Registry Functional Specification states that average daily consumption within the CS file should be the average kWh per day for the last read period. During the audit period Plus Energy calculated 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 provided a reasonable indication of the average daily consumption. During the audit Plus Energy adjusted their process to be compliant with the Registry Functional Specification and provided updated procedural documentation.

Review of average daily kWh for transfer CS files found:

- the CS file for ICP 0191652385LCCD2 (14 April 2021) had zero average daily kWh but should have had 89 kWh based on the last two actual reads, and
- the CS file for ICP 0000233486MPD9C (1 January 2021) had average daily kWh of 316 but should have had 293 kWh based on the last two actual reads.

I checked for inconsistencies between the switch event date, last actual read date and switch event read type for the 23 transfer switch CS files issued during the audit period, and found none.

The content of a sample of five transfer CS files were checked. All CS content was confirmed to be correct apart from ICP 0986989295LC9B9 (27 October 2021) which had average daily kWh of 7 but should have had 4 kWh based on the last two actual reads.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.3 With: Clause 5 Schedule 11.3 From: 01-Jan-21 To: 27-Oct-21	Three transfer CS files (0191652385LCCD2 14/04/21, 0000233486MPD9C 01/01/21 and 0986989295LC9B9 27/10/21) contained incorrect average daily kWh. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	The controls are now rated as strong because the method to calculate average daily kWh has been updated to match the Registry Functional Specification. The non-compliances occurred because the average daily kWh was calculated based on the average daily kWh for the last month of supply at the time the CS files were created. The impact is low because the affected meters have AMI capability, and it is unlikely that the average daily kWh would be needed to create forward estimate.

Actions taken to resolve the issue	Completion date	Remedial action status
We had previously been advised to use last billing period to calculate the average daily used as this is more accurate for the consumer and gaining retailer than using just the last day the ICP is with as the “average” usage. We have now been advised that we are to use just the last day the ICP is with us and we have been doing this since advised of this	15/01/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Have adopted this advice and are now using just the last day with us as the average.	15/01/2022	

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The process for the management of read change requests was examined. The event detail report was analysed 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.

The switch breach history report for the audit period was reviewed.

Audit commentary.

RR

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. Agreed switch readings are imported into the RM tool from the registry.

No RR files were issued for transfer switches, and the switch breach history report did not record any late RR files.

AC

AC files are issued manually using the registry user interface, and timeliness of AC files is monitored using the switch breach history report. Agreed switch readings are imported into the RM tool from the registry.

Two AC files were issued for transfer switches, both accepted the other trader's RR reading. The correct switch event readings were recorded in the RM tool.

The switch breach history report did not record any late AC files.

CS files with estimated readings where no RR is issued

Five switch move CS files with estimated reads where no RR was issued were reviewed, and I confirmed the correct readings were applied in the RM tool.

Audit outcome

Compliant

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report 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 2 business days after the arrangement comes into effect.

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

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

Audit observation

The 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 114 switch move NTs were issued. All had metering category 1.

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

Audit outcome

Compliant

4.8. 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 was reviewed to identify all AN files, and the switch breach history report was reviewed to identify late AN and CS files.

Audit commentary

AN and CS files which are due are identified using the registry switch breach report, and created manually on the registry. No AN files were issued for switch moves, and the switch breach history report did not record any late AN files.

The switch breach history report recorded two E2 breaches for CS files where the CS event date was before the NT proposed event date:

- ICP 0000742080TU499 was requested for 6 May 2021 and transferred on 5 May 2021 due to a data entry error, and
- ICP 0156058448LCB18 was requested on 16 August 2021 and transferred from 10 June 2021, which was the correct move in date and agreed with the other trader; the switch was later withdrawn and re-requested and completed from 10 June 2021.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.8 With: Clause 10(1) Schedule 11.1 From: 05-May-21 To: 10-Jun-21	Two E2 breaches. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong, because most event dates are compliant and the exceptions appear to be isolated. The impact is low, one CS event date was one day early and the other was issued from the correct move in date.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required.			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
0156058448LCB18 was an attempt by the consumer aided by their gaining retailer, to avoid paying for electricity they had used between their actual MI date of 10 June and the proposed switch date of 16 August. With the help of the property owner and their property manager we were able to gain the consumers and their gaining retailers acknowledgement that they had in fact moved in on the 10 June. Refresher training completed for 0000742080TU499		Was correctly entered at the time. 21/2/2022	

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

The event detail and switch breach history reports were reviewed to assess compliance with the setting of event dates requirements.

Audit commentary

No AN files were issued for switch moves.

The switch breach history report recorded two E2 breaches for CS files where the CS event date was before the NT proposed event date which are recorded as non-compliance in **section 4.8**:

- ICP 0000742080TU499 was requested for 6 May 2021 and transferred on 5 May 2021, and
- ICP 0156058448LCB18 was requested on 16 August 2021 and transferred from 10 June 2021 (which was the correct move in date). The switch was later withdrawn and re-requested and completed from 10 June 2021.

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 was 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 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 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 states that average daily consumption within the CS file should be the average kWh per day for the last read period. During the audit period Plus Energy calculated 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 provided a reasonable indication of the average daily consumption. During the audit Plus Energy adjusted their process to be compliant with the Registry Functional Specification and provided updated procedural documentation.

Review of average daily kWh for transfer CS files found:

- six CS files with zero; four were correct and two should have had two to three kWh reported based on the consumption for the last read to read period, but zero was reported based on the previous month for 1002042884LC957 (12 June 2021) and 1002069641LC3D1 (9 June 2020), and
- one CS file with over 200 kWh; the actual average daily consumption was based on the last two actual reads of 500 kWh for 0000233486MPD9C (12 May 2020), but 440 kWh was reported based on the previous month.

I checked for inconsistencies between the switch event date, last actual read date and switch event read type for the 116 switch move CS files issued during the audit period and found:

- one CS with a last actual read date the day before the event date with an estimated switch event reading; the ICP switched to Plus Energy the day before switching out, and the switch event reading was estimated and because no actual reading was received, Plus Energy applied the last actual read date from the incoming CS file,
- no CS files with a last actual read date more than one day before the last day of supply with an actual read, and
- three CS files with a last actual read date on the switch event date, and some incorrect information was recorded in each of the files:

ICP and event date	Issue
0000742080TU499 (05/05/21)	Last actual read date was recorded as 05/05/21 instead of 04/05/21.
0686291993LCFD0 (29/06/20)	Last actual read date was recorded as 29/06/20 instead of 28/06/20. Switch event read was recorded as 21297 (A) instead of 21288 (A).
0674912572LC3B7 (30/06/20)	Last actual read date was recorded as 30/06/20 instead of 29/06/20. Switch event read was recorded as 18713 (A) instead of 18680 (A). Average daily kWh was recorded as 7 instead of 33 kWh.

The content of a sample of a further five switch move CS files were checked and some incorrect information was identified:

ICP and event date	Issue
0000812235TUC6D (29/06/21)	Last actual read date was recorded as 02/06/21 instead of 28/06/21. Switch event read was recorded as 38068 (E) the final reading the customer was billed to, instead of 38092 (A). Average daily kWh was recorded as 10 instead of 2 kWh.
0000060102NTBB7 (20/09/20)	Average daily kWh was recorded as 17 instead of 26 kWh.
1001128512LC188 (17/05/21)	Average daily kWh was recorded as 7 instead of 11 kWh.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 4.10 With: Clause 11 Schedule 11.3</p> <p>From: 05-May-20 To: 12-Jun-21</p>	<p>Seven switch move CS files contained incorrect average daily kWh (1002042884LC957 12/06/21, 1002069641LC3D1 09/06/20, 0000233486MPD9C 12/05/20, 0674912572LC3B7 30/06/20, 0000812235TUC6D 29/06/21, 0000060102NTBB7 20/09/20, and 1001128512LC188 17/05/21).</p> <p>Four switch move CS files contained incorrect last actual read dates (0000742080TU499 05/05/21, 0686291993LCFD0 29/06/20, 0674912572LC3B7 30/06/20 and 0000812235TUC6D 29/06/21).</p> <p>Three switch move CS files contained incorrect switch event readings (0686291993LCFD0 29/06/20 21297 (A) instead of 21288 (A) difference of -9, 0674912572LC3B7 30/06/20 18713 (A) instead of 18680 (A) difference of -33, 0000812235TUC6D 29/06/21 38068 (E) instead of 38092 (A) difference of +24 kWh.</p> <p>Potential impact: Low Actual impact: Low Audit history: Three times Controls: Moderate Breach risk rating: 2</p>	
Audit risk rating	Rationale for audit risk rating	
<p>Low</p>	<p>The controls are rated as moderate overall:</p> <ul style="list-style-type: none"> the method to calculate average daily kWh has been updated to match the Registry Functional Specification and the non-compliances occurred because the average daily kWh was calculated based on the average daily kWh for the last month of supply at the time the CS files were created, and the incorrect last actual read dates and readings appear to be manual data processing errors. <p>The impact is assessed to be low because the incorrect information may have a minor impact on settlement. All errors identified occurred in June 2021 or earlier.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p>We have changed the average daily usage calculation as explained above. The incorrect use of the read date instead of the last read date is a human error, refresher training has been completed on this. The use of the incorrect switch date resulted in the incorrect last read being used, a related issue. Refresher training has been completed.</p>	<p>15/01/2022</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Refresher training completed</p>	<p>21/02/2022</p>	

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

Code reference

Clause 12 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The process for the management of read change requests was examined. The event detail report was analysed 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.

The switch breach history report for the audit period was reviewed.

Audit commentary

RR

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. Agreed switch readings are imported into the RM tool from the registry.

Two RRs were issued for ICP 1001103247LCDE0. The first RR was rejected, and a second RR with a different reading was accepted. The RRs were supported by two actual readings and contained correct information, and the RM tool reflected the outcome of the RR process.

The switch breach history report did not record any late RR files.

AC

AC files are issued manually using the registry user interface, and timeliness of AC files is monitored using the switch breach history report. Agreed switch readings are imported into the RM tool from the registry.

One AC file was issued for a switch move, both accepted the other trader's RR reading. The correct switch event readings were recorded in the RM tool.

The switch breach history report did not record any late AC files.

CS files with estimated readings where no RR is issued

Five switch move CS files with estimated reads where no RR was issued were reviewed, and I confirmed the correct readings were applied in the RM tool.

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 3 business days after the arrangement comes into effect.

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

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

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

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

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

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

Audit observation

The event detail report 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 or 2.

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

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

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

Audit observation

The event detail report was reviewed to identify all AN files and the switch breach history report was reviewed.

Audit commentary

No AN files were issued for HH switches, and the switch breach history report did not record any late AN files.

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 5 business days after the metering installation is electrically disconnected or removed, advise the losing trader of the results and metering component numbers for each data channel in the metering installation.

Audit observation

The event detail report was analysed to identify HH CS files issued by Plus Energy during the audit period. The switch breach history report was examined.

Audit commentary

The event detail report did not record any HH CS files issued by Plus Energy. The switch breach history 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 2 calendar months after the event date of the switch.

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

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

Audit observation

The event detail report 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, and
- identify all switch withdrawal acknowledgements issued by Plus Energy.

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

Audit commentary

NW

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 eight ICPs. Two NWs were rejected. I checked a sample of six NWs and found two had the DF (date failed) code incorrectly applied. Both had incorrect dates, but DF should only be applied where the switch event date is more than ten business days in the future.

The switch breach history report did not record any late NW files.

AW

Six of the 13 AWs issued by Plus Energy were rejections. The files were rejected based the information available at the time the response was issued.

The switch breach history report did not record any late AW files.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.15 With: Clauses 17 and 18 Schedule 11.3 From: 01-Sep-21 To: 07-Sep-21	Two incorrect withdrawal reason codes were applied. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong. The DF code was incorrectly applied where the requested date was incorrect, but not more than ten business days in the future. The impact is assessed to be low because a small proportion of NWs were issued late, or with incorrect codes.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required			Identified

Preventative actions taken to ensure no further issues will occur	Completion date
We were unaware that the DF code should only be applied where the switch event date is more than ten business days in the future. The error was a date issue hence we used the DF code. Training completed.	21/2/2022

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.

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 for the sample of CS files checked, apart from:

ICP and event date	Switch type	Applied event read	Correct event read	Difference
0686291993LCFD0 29/06/20	MI	21297 (A)	21288 (A)	-9 kWh
0674912572LC3B7 30/06/20	MI	18713 (A)	18680 (A)	-33 kWh
0000812235TUC6D 29/06/21	MI	38068 (E)	38092 (A)	+24 kWh

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

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.16</p> <p>With: Clause 21 Schedule 11.3</p> <p>From: 29-Jun-20</p> <p>To: 29-Jun-21</p>	<p>Three switch move CS files did not contain the actual reading or best estimate of consumption on Plus Energy's last day of supply:</p> <ul style="list-style-type: none"> • 0686291993LCFD0 29/06/20 21297 (A) instead of 21288 (A) difference of -9 • 0674912572LC3B7 30/06/20 18713 (A) instead of 18680 (A) difference of -33 • 0000812235TUC6D 29/06/21 38068 (E) instead of 38092 (A) difference of +24 kwh. <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>The controls are rated as moderate. The incorrect readings appear to be manual data processing errors.</p> <p>The impact is assessed to be low because the incorrect information may have a minor impact on settlement. All errors identified occurred in June 2021 or earlier.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>As described above, we have changed the way we have been calculating average daily usage to use just the last day the ICP is with us.</p> <p>As per 4.10 the incorrect last date was human error, we used the switch out date instead of the prior days date. This resulted in the incorrect read being used (out by one day). Refresher training has been completed.</p>		15/01/2022	

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

Code reference

Clause 11.15AA to 11.15AC

Code related audit information

A losing retailer (including any party acting on behalf of the retailer) must not initiate contact to save or win back any customer who is switching away or has switched away for 180 days from the date of the switch.

The losing retailer may contact the customer for certain administrative reasons and may make a counteroffer only if the customer initiated contact with the losing retailer and invited the losing retailer to make a counteroffer.

The losing retailer must not use the customer contact details to enable any other retailer (other than the gaining retailer) to contact the customer.

Audit observation

Win-back processes were discussed. The event detail report was analysed to identify all withdrawn switches with a CX code applied 180 days of switch completion after 30 March 2020.

Audit commentary

Plus Energy 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. Three switches were withdrawn with the code "CX" within 180 days of switch completion where Plus Energy was the losing trader. In all three cases the switch was withdrawn so that the customer could move to another trader, and did not remain with Plus Energy. No enticements were offered.

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 and AC020 report 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 and AC020 report 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 1 October 2021. 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 and AC020 report 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 1 October 2021. 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 and AC020 report were examined to identify any ICPs with distributed unmetered load.

Audit commentary

Plus Energy does not supply any ICPs with distributed 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

Processes to ensure metering is installed and unmetered load is quantified were examined.

The AC020 trader compliance report, meter event details report, and registry list files were reviewed to determine compliance.

Audit commentary

Metering installations installed

All active metered ICPs have an MEP, and at least one meter channel. No ICPs have submission information determined by subtraction.

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

Distributed generation

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

Plus Energy does not currently supply any ICPs with distributed generation. 11 ICPs with distributed generation were supplied earlier in the audit period. All had EG registers installed, and I confirmed that I flow volumes had been submitted as NHH or HHR. The profiles were compatible with the fuel types recorded by the distributor.

The audit compliance report did not identify any ICPs with distributed generation recorded by the distributor where Plus Energy did not record a profile compatible with generation.

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 3 months for the grid owner to review and comment on the design*
- *respond within 3 business days of receipt to any request from the grid owner for additional details or changes to the design*
- *ensure any reasonable changes from the grid owner are carried out.*

The participant responsible for the metering installation must:

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

Audit observation

The NSP table was reviewed.

Audit commentary

Review of the NSP table confirmed that Plus Energy is not responsible for any GIPs.

Audit outcome

Compliant

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 and AC020 report were reviewed to determine compliance.

Audit commentary

Plus Energy has only used the HHR, PV1, 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

During the audit period, Plus Energy has received readings from AMS, Arc, FCLM, Metrix and Smartco as MEPs, and Wells as an agent. For currently active ICPs, Plus Energy receives readings from AMS, FCLM, Metrix and Smartco. MEPs are to advise Plus Energy of clock synchronisation discrepancies and adjustments.

I traced readings for active ICPs supplied in October 2021 from the source files to the RM tool to confirm the process.

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.

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

I traced a diverse sample of readings for the 23 active ICPs which received readings in October 2021 from the source files to the RM Tool and found the readings matched the source files exactly.

MEPs advise Plus Energy of clock synchronisation events. No clock synchronisation events requiring action were received during the audit period.

Audit outcome

Compliant

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

Code reference

Clauses 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 and customer and photo read processes were examined.

Processes to provide meter condition information were reviewed as part of Wells' agent audit.

Audit commentary

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

Wells readings

ICP 0006560414HB35D has recently been added to a Wells meter reading round, all other ICPs have AMI or HHR metering and reads are provided by the MEP. Wells monitors meter condition and provides information on issues which could affect meter accuracy. No examples of meter condition events which could affect accuracy were identified during the audit period.

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. Customer and photo readings are treated as estimates unless validated against a set of validated actual readings from another source.

The previous audit found the customer had provided a photo reading for 0000681305HB547 on 9 April 2019 and the unvalidated manual reading was transferred to John Candy Consulting and was treated as an actual validated read by the HE calculation process. Five actual readings were received from Wells between 28 September 2019 and 29 October 2019 which were used to validate the customer reading, clearing the non-compliance.

Audit outcome

Compliant

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

Code reference

Clause 6 Schedule 15.2

Code related audit information

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

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

Audit observation

The 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**. Three CS readings did not reflect the actual reading or best estimate of consumption on Plus Energy's last day of responsibility.

ICP and event date	Switch type	Applied event read	Correct event read	Difference
0686291993LCFD0 29/06/20	MI	21297 (A)	21288 (A)	-9 kWh
0674912572LC3B7 30/06/20	MI	18713 (A)	18680 (A)	-33 kWh
0000812235TUC6D 29/06/21	MI	38068 (E)	38092 (A)	+24 kWh

No downgrades occurred during the audit period. ICP 0000390158MP624 underwent a change from RPS PV1 to HHR profile on 1 September 2020. The profile change did not coincide with a meter change and took effect at midnight; consumption and ICP days were correctly reported.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 6.7</p> <p>With: Clause 6 Schedule 15.2</p> <p>From: 05-May-20</p> <p>To: 12-Jun-21</p>	<p>Three switch move CS files did not contain the actual reading or best estimate of consumption on Plus Energy's last day of supply:</p> <ul style="list-style-type: none"> 0686291993LCFD0 29/06/20 21297 (A) instead of 21288 (A) difference of -9 0674912572LC3B7 30/06/20 18713 (A) instead of 18680 (A) difference of -33 0000812235TUC6D 29/06/21 38068 (E) instead of 38092 (A) difference of +24 kWh. <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. The incorrect readings appear to be manual data processing errors.</p> <p>The impact is assessed to be low because the incorrect information may have a minor impact on settlement. All errors identified occurred in June 2021 or earlier.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
No action required		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
As described above, we have changed the way we have been calculating average daily usage to use just the last day the ICP is with us. As per 4.10 the incorrect last date was human error, we used the switch out date instead of the prior days date. This resulted in the incorrect read being used (out by one day). Refresher training has been completed.		

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 non-half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, unless exceptional circumstances prevent this from occurring. This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

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

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

All current Plus Energy ICPs have category 1 HHR metering installed and receive electronic readings from the MEP apart from ICP 0006560414HB35D, which has recently been added to a Wells meter reading round.

John Candy 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.

John Candy Consulting confirmed that all ICPs received an actual reading during the period of supply where the period of supply ended between 1 March 2020 and 31 October 2021.

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 for November 2020 to October 2021 were provided and reviewed to determine whether they met the requirements of clauses 8 and 9 of schedule 15.2.

Unread ICPs on the NSPs where less than 100% read attainment was achieved for May 2021 to October 2021 were reviewed to determine whether exceptional circumstances existed.

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
Nov-20	1	-	-	100.00%
Dec-20	-	-	-	-
Jan-21	-	-	-	-
Feb-21	-	-	-	-
Mar-21	-	-	-	-
Apr-21	1	-	-	100.00%
May-21	2	1	1	50.00%
Jun-21	5	1	1	80.00%

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Jul-21	5	1	1	80.00%
Aug-21	4	1	1	75.00%
Sep-21	4	1	1	75.00%
Oct-21	6	1	1	83.33%

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

ICP 0000009466NTEB0 was unread for the 12 months ending October 2021. The ICP switched in from CTCT with inactive status (remotely disconnected by AMI meter) on 29 May 2020. Plus Energy attempted to withdraw the switch but the request was rejected and the ICP has remained disconnected with no readings received. Exceptional circumstances exist because the ICP is disconnected.

I reviewed meter reading frequency reports for November 2020 to September 2021 and confirmed that they met the meter reading frequency report requirements. I reviewed submission confirmations for meter reading frequency reports for June 2020 to September 2021 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 for November 2020 to October 2021 were reviewed.

One ICP was unread in the four months ended October 2021 and was reviewed to determine whether exceptional circumstances existed. The ICP was connected to an NSP where one NHH ICP is 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
Nov-20	10	1	1	95.83%
Dec-20	10	2	2	92.59%
Jan-21	8	1	1	96.55%
Feb-21	11	1	1	96.88%
Mar-21	13	1	1	96.88%
Apr-21	13	1	1	95.83%
May-21	15	1	1	96.00%
Jun-21	18	1	1	96.15%
Jul-21	20	1	1	95.45%
Aug-21	20	1	1	95.65%
Sep-21	20	1	1	96.15%
Oct-21	18	1	1	96.15%

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

ICP 0000009466NTEB0 was unread for the four months ending October 2021. The ICP switched in from CTCT with inactive status (remotely disconnected by AMI meter) on 29 May 2020. Plus Energy attempted to withdraw the switch but the request was rejected and the ICP has remained disconnected with no readings received. Exceptional circumstances exist because the ICP is disconnected.

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 as an agent. No ICPs have required readings from Wells since May 2021. ICP 0006560414HB35D has recently been added to a Wells meter reading round.

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.

The last data collection by Wells occurred prior to the completion of their 2021 agent audit.

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 confirmed that Plus Energy has not supplied any HHR ICPs with metering category 3 or higher.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

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

Audit commentary

Compliance with this clause has been demonstrated by the MEPs as part of their own audits.

Audit outcome

Compliant

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

Code reference

Clause 18 Schedule 15.2

Code related audit information

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

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

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

Audit observation

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

The last data collection by Wells occurred prior to the completion of their 2021 agent audit, and compliance is recorded. ICP 0006560414HB35D has recently been added to a Wells meter reading round.

All raw reading files will be retained by John Candy Consulting for the foreseeable future, 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, and correction processes are discussed in **section 2.1**.

Audit commentary

Read files are sent directly to John Candy Consulting by the MEPs and agents and switch event readings are obtained directly from the registry by John Candy Consulting.

Where errors are detected in the validation process discussed in **section 9.5**, John Candy Consulting consults with Plus Energy to determine whether the reading is inaccurate and should be excluded from reconciliation. NHH corrections are processed by John Candy Consulting as Plus Energy's agent, and the processes discussed in **section 2.1** achieve compliance.

If Plus Energy finds a reading is incorrect through their own billing validation process or information received from the customer, John Candy Consulting is advised by email.

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. All active HHR ICPs switched out effective 1 December 2020.

Audit commentary

HHR corrections are processed by John Candy 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.

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 2.1, 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.

John Candy 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. One switch move CS file had an incorrect read type recorded, an estimated reading was recorded instead of an actual.

ICP and event date	Switch type	Applied event read	Correct event read	Difference
0000812235TUC6D 29/06/21	MI	38068 (E)	38092 (A)	+24 kwh

The previous audit found the customer had provided a photo reading for 0000681305HB547 on 9 April 2019 and the unvalidated manual reading was transferred to John Candy Consulting and was treated as an actual validated read by the HE calculation process. Five actual readings were received from Wells between 28 September 2019 and 29 October 2019 which were used to validate the customer reading, clearing the non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 9.1 With: Clause 3(3) Schedule 15.2 From: 29-Jun-21 To: 29-Jun-21	An incorrect switch event read and read type was recorded in the CS file for ICP 0000812235TUC6D 29/06/21. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate. The incorrect reading appears to be a manual data processing error.</p> <p>The impact is assessed to be low because the incorrect information may have a minor impact on settlement. All errors identified occurred in June 2021 or earlier.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Refresher training completed		21/02/2022	

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 **sections 11 and 12**, to confirm that volume was based on readings as required.

All ICPs have metering category 1 and NHH and HHR data is collected MEPs and compliance was assessed as part of their audits.

I traced a sample of meter data from the source files to John Candy's RM tool system.

Audit commentary

The MEP or agent retains raw, unrounded data. Compliance was demonstrated by the MEPs during their own audits. No ICPs with Arc meters have HHR submission type.

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. All active HHR ICPs switched out effective 1 December 2020.

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.

I checked two examples of HHR estimates created in September 2020, both replaced missing data during outages and actual data did not become available at a later date. In both cases estimates were correctly marked and the reasonable endeavours requirement was met.

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 John Candy Consulting RM Submission Process documentation was reviewed.

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

Audit commentary

The last data collection by Wells occurred prior to the completion of their 2021 agent audit, and compliance is recorded. ICP 0006560414HB35D has recently been added to a Wells meter reading round. 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.

Points “a” and “b” above are conducted by John Candy 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 inactive, excessive, negative, and zero consumption examples are identified and reported to Plus Energy. I checked the October 2021 submission and found four active ICPs with zero consumption, in all cases the zeros were only for part of the month and the remainder of the month had volumes recorded indicating that there was no fault with the meter.

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 the meter and data storage device event log for any event that could have affected the integrity of metering data

17(4)(g) – a review of the relevant metering data where there is an event that could have affected the integrity of the metering data

If there is an event that could affect the integrity of the metering data (including events reported by MEPs, but excluding where the MEP is responsible for investigating and remediating the event) the reconciliation must investigate and remediate any events.

If the event may affect the integrity or operation of the metering installation the reconciliation participant must notify the metering equipment provider.

Audit observation

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

Audit commentary

John Candy Consulting check for missing data, invalid dates and times, unexpected zeros, and register readings are compared to the sum of intervals for HHR data. 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 John Candy Consulting, because they have found that they usually do not contain events that require action and issues are expected to be identified through other validation checks.

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.	<p>As recommended, we will consult with the MEPs on what event types they report on and what actions they believe is appropriate for us to complete.</p> <p>Where we find a MEP's meter is not providing reads, we inform the MEP and request they fix their meters communication issues.</p> <p>Where we find a meter certification has expired, we inform the MEP and if they are unwilling to recertify their meter in a timely manner we arrange for the meter to be replaced.</p>	Identified

John Candy Consulting provided meter event files received during the audit period, and they did not contain any events which could affect accuracy. 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 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 John Candy Consulting as an agent. The process for the calculation of ICP days was examined by checking all NSPs on the NHH AV110 submissions for September and October 2021 and HHR AV110 submissions for November 2020 (the last month where active HHR ICPs were supplied).

I reviewed GR100 reports from November 2019 to October 2021 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 AV110 submissions for September and October 2021 and HHR AV110 submissions for November 2020 (the last month where active HHR ICPs were supplied). 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 November 2019 to October 2021.

Month	Ri	R1	R3	R4	R7	R8	R14	R15
Nov 2019	-	-	0.00%	-	0.00%	-	0.00%	-
Dec 2019	0.00%	0.00%	0.00%	-	0.00%	-	0.00%	-
Jan 2020	0.00%	0.00%	0.00%	-	0.00%	-	0.00%	0.00%
Feb 2020	-0.37%	0.00%	0.00%	-	0.00%	-	0.00%	-
Mar 2020	0.00%	0.00%	0.00%	-	0.00%	-	0.00%	-
Apr 2020	0.00%	0.00%	0.00%	-	0.00%	-	0.00%	-
May 2020	0.00%	0.00%	0.00%	-	0.00%	-	0.00%	-
Jun 2020	-8.81%	-3.36%	0.00%	-	0.00%	-	0.00%	-
Jul 2020	0.00%	0.00%	0.00%	-	0.00%	-	0.00%	-
Aug 2020	0.00%	0.91%	0.00%	-	0.00%	-	0.00%	-
Sep 2020	0.00%	0.00%	0.00%	-	0.00%	-	-	-
Oct 2020	-3.18%	0.00%	0.00%	-	0.00%	0.00%	-	-
Nov 2020	-	0.00%	0.00%	-	0.00%	-	-	-
Dec 2020	1.22%	0.00%	0.00%	-	0.00%	-	-	-
Jan 2021	0.00%	0.00%	0.00%	-	0.00%	-	-	-
Feb 2021	0.00%	0.00%	0.00%	-	0.00%	-	-	-
Mar 2021	0.00%	0.00%	0.00%	-	0.00%	-	-	-
Apr 2021	0.00%	0.00%	0.00%	-	-	-	-	-

Month	Ri	R1	R3	R4	R7	R8	R14	R15
May 2021	0.00%	0.88%	0.00%	-	-	-	-	-
Jun 2021	0.00%	0.00%	0.00%	-	-	-	-	-
Jul 2021	0.00%	0.00%	0.00%	-	-	-	-	-
Aug 2021	0.00%	0.00%	-	-	-	-	-	-
Sep 2021	0.00%	0.00%	-	-	-	-	-	-
Oct 2021	0.00%	-	-	-	-	-	-	-

I reviewed all NSP level ICP days differences and found they related to switch timing or backdated NSP changes and occurred only in the initial submission and revision 1. Corrected data has been washed up through the revision process.

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 John Candy 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 July 2020, August 2020, and October 2021 to confirm the AV120 calculation was correct.

GR130 reports from November 2018 to October 2021 were reviewed to confirm whether the relationship between billed and submitted data appears reasonable.

Audit commentary

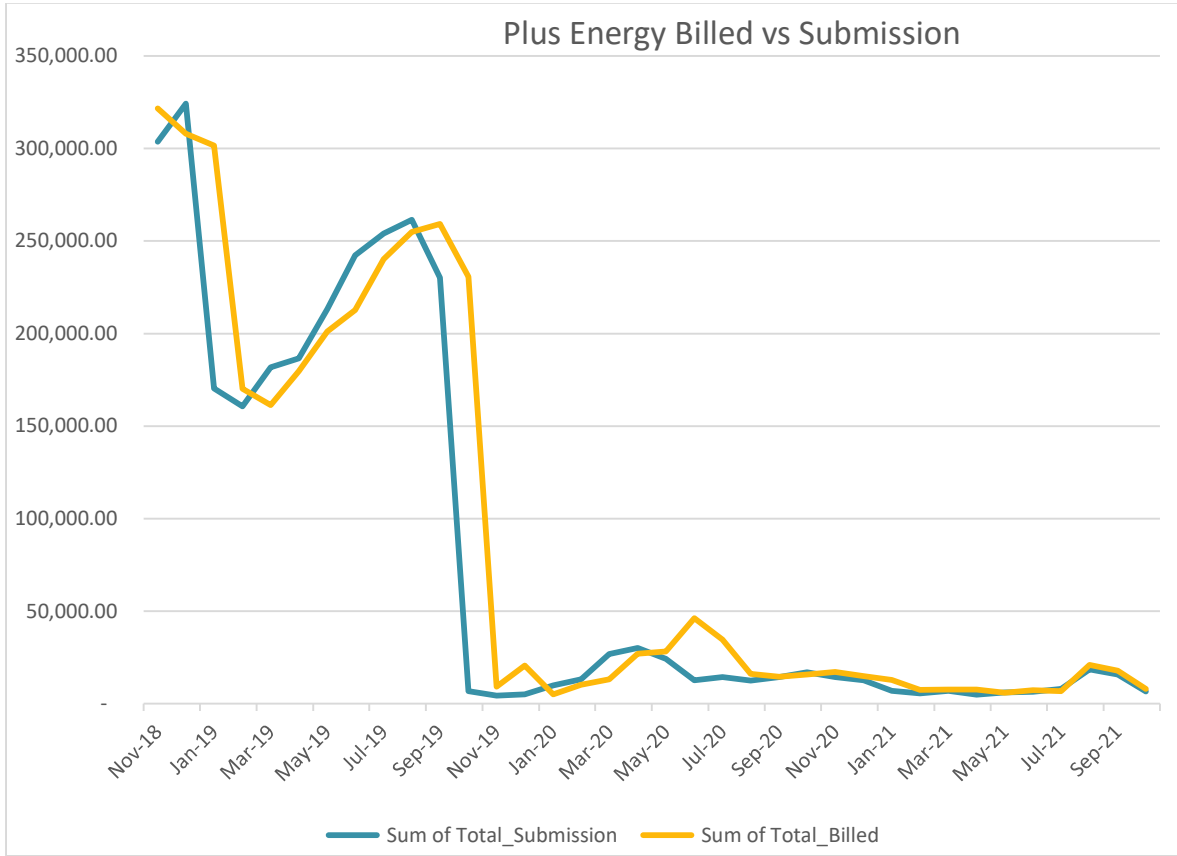
The process for the calculation of as billed volumes was examined by checking the AV120 submission volumes against billed data for May to August 2020, and October 2021.

There were some differences between the raw billed and AV120 data for July 2020 and August 2020, which occurred due to switch or billing timing, rounding and corrections to the billed data. The AV120 calculations were confirmed to be correct.

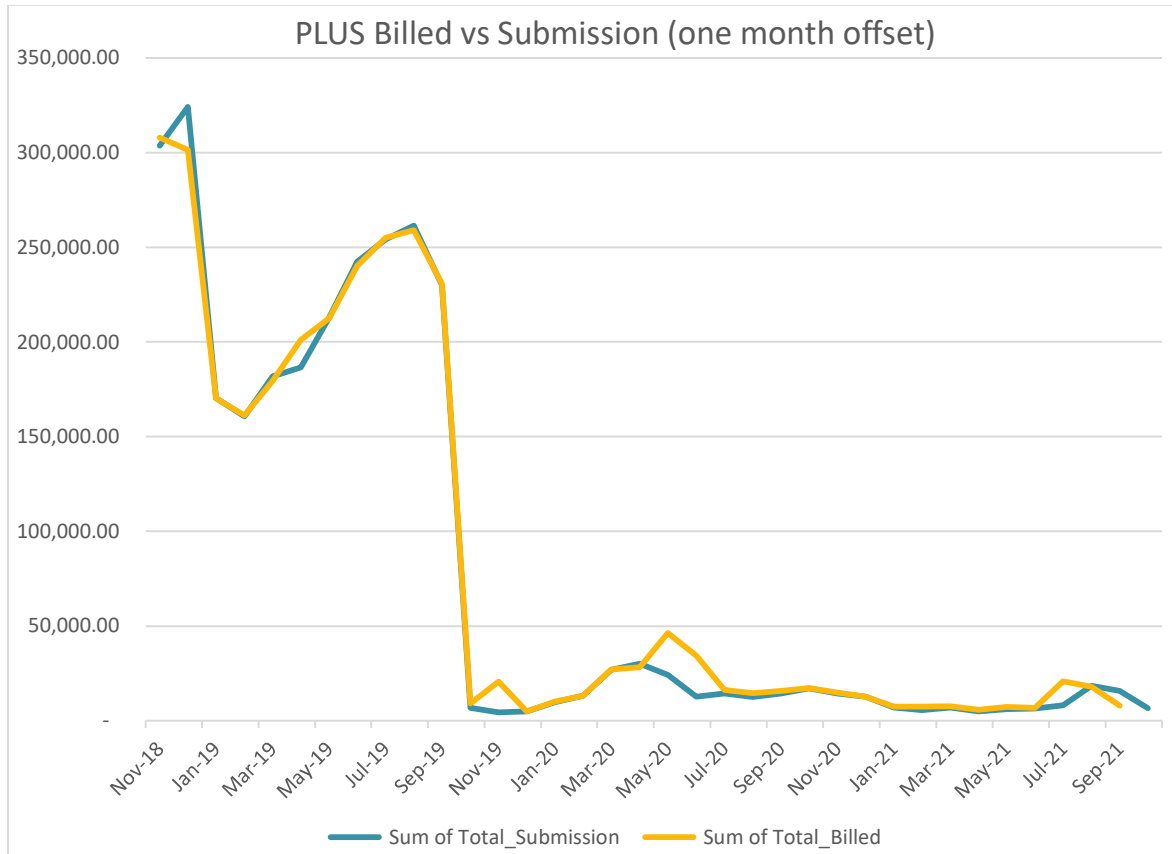
For October 2021, the total submitted on the AV120 matched the total billed provided by Plus Energy, however there were differences at NSP level, suggesting that there may be a difference between how the billed data was mapped to NSPs in the raw data and AV120. I recommend that this is investigated further to ensure that mapping is correct.

Description	Recommendation	Audited party comment	Remedial action
Reconcile AV120 to raw billed data	Validate the AV120 against the raw billed data at NSP level to ensure that report aggregation is correct.	As we have been forced to move to a "Tier 2" trading model there is often a timing difference between billed and submitted volumes. We report billed volumes for a month as the amount invoiced to a customer which can be different to submitted volumes where we have switched an ICP to our Tier 2 provider during a month. Sometimes the switch to our provider is back dated and this again means billed and submitted volumes won't reconcile. I can confirm that all submitted volumes are billed to customers, but billed volumes can be above submitted volumes for the reason given above.	Investigating

I also checked the difference between submission and electricity supplied information for a 36-month period, and the results are shown in the chart below. The total difference is 20.6% for the year ended October 2021 (billed higher than submission), and 16.0% for the two years ended October 2021 (billed higher than submission).



Due to Plus Energy’s billing cycle, there is a one month offset between billed and submitted consumption. Even once data was aligned there was a difference of 8.2% for the year ended September 2021 (billed higher than submission). I investigated the differences, and they appear to be caused by switch or billing timing, rounding and corrections to the billed data.



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

All active HHR ICPs switched out effective 1 December 2020, and no HHR submissions were required after the November 2020 submission period. HHR aggregates and volumes submissions were completed by John Candy 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 for nine submissions, and HHR meter data received from the MEP for the November 2020 initial, revision one, and revision three submissions.

The GR090 ICP Missing files were examined for November 2018 to October 2021.

Audit commentary

I checked the process for aggregation of HHR data is correct by matching:

- HHR aggregates information to the HHR volumes for nine submissions and found they matched within ± 0.1 kWh, and
- the raw data received from the MEP to the HHR aggregates file for all ICPs on the November 2020 initial, revision one and revision three submissions; all periods which had volumes provided matched exactly to the MEP data, and compensation factors were correctly applied.

The GR090 ICP Missing files were examined for November 2018 to October 2021. No ICPs were missing from the registry or aggregates files.

Audit outcome

Compliant

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

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

Audit observation

All active HHR ICPs switched out effective 1 December 2020, and no HHR submissions were required after the November 2020 submission period. Daylight savings adjustments were completed by John Candy Consulting.

Audit commentary

Daylight saving adjustment is conducted by John Candy Consulting in a compliant manner. I checked HHR volumes files for the beginning (5 April 2020) and end (27 September 2020) 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 John Candy 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.

- Volumes are calculated and submitted 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.
- Plus Energy does not currently supply any ICPs with distributed generation. 11 ICPs with distributed generation were supplied earlier in the audit period. All had EG registers installed, and I confirmed that I flow volumes had been submitted as NHH or HHR.
- ICP 0013540465ELF0E was supplied with metered and unmetered load from 24 November 2020 until 30 September 2021, and the trader and distributor unmetered load details matched exactly. I checked six months of submission information and confirmed that the unmetered load was reported correctly. No other ICPs had unmetered load details recorded by the trader or distributor.

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 October 2020. The GR170 to AV080 files for 40 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 October 2021. NHH volume calculation was confirmed to be correct.

GR170 and AV080 files for 40 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

The Authority did not record any breaches for late provision of submission information.

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

As discussed in **section 4.10**, three CS readings did not reflect the actual reading or best estimate of consumption on Plus Energy's last day of responsibility. The agreed switch reading was applied for reconciliation, but this was not the correct reading.

ICP and event date	Switch type	Applied event read	Correct event read	Difference
0686291993LCFD0 29/06/20	MI	21297 (A)	21288 (A)	-9 kWh
0674912572LC3B7 30/06/20	MI	18713 (A)	18680 (A)	-33 kWh
0000812235TUC6D 29/06/21	MI	38068 (E)	38092 (A)	+24 kWh

The previous audit found the customer had provided a photo reading for 0000681305HB547 on 9 April 2019 and the unvalidated manual reading was transferred to John Candy Consulting and was treated as an actual validated read by the HE calculation process. Five actual readings were received from Wells between 28 September 2019 and 29 October 2019 which were used to validate the customer reading, clearing the non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.7 With: Clause 15.12 From: 29-Jun-20 To: 29-Jun-21	Three switch move CS files did not contain the actual reading or best estimate of consumption on Plus Energy's last day of supply, which resulted in under or over submission relative to the correct value: <ul style="list-style-type: none"> • 0686291993LCFD0 29/06/20 21297 (A) instead of 21288 (A) difference of -9 • 0674912572LC3B7 30/06/20 18713 (A) instead of 18680 (A) difference of -33 • 0000812235TUC6D 29/06/21 38068 (E) instead of 38092 (A) difference of +24 kWh. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong because the agreed switch readings were applied for reconciliation. The issue was caused by inaccurate readings being applied in a small number of CS files. The impact is assessed to be low because the incorrect information may have a minor impact on settlement. All errors identified occurred in June 2021 or earlier.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required			Choose an item.

Preventative actions taken to ensure no further issues will occur	Completion date	
As described above, we have changed the way we have been calculating average daily usage to use just the last day the ICP is with us. As per 4.10 the incorrect last date was human error, we used the switch out date instead of the prior days date. This resulted in the incorrect read being used (out by one day). Refresher training has been completed.	21/02/2022	

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 November 2018 to August 2020 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)(ac) to 2(1)(ae)):*
- 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 use volume information (clause 2(3))*
 - *to calculate volume information the reconciliation participant must apply raw meter data :*
 - a) for each ICP, the compensation factor that is recorded in the registry (clause 2(4)(a))*
 - b) for each NSP the compensation factor that is recorded in the metering installations most recent certification report (clause 2(4)(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,
- 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, and
- 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 66 AV080 submissions for revisions three 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 66 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 (Clauses 4 and 5 Schedule 15.3)

Code reference

Clauses 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 historical estimates of volume information for each ICP when the relevant seasonal adjustment shape is available, and the reconciliation participant is not using an approved profile in accordance with clause 4A.

If the Authority has approved a profile for the purpose of apportioning volume information (in kWh) to part or full consumption periods, a reconciliation participant may use the profile despite the relevant seasonal adjustment shape being available; and if it uses the profile, must otherwise prepare the historical estimate in accordance with the methodology in clause 4.

*If a seasonal adjustment shape is not available, and the **reconciliation participant** is not using an approved **profile** under clause 4A, 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 to identify ICPs where the scenarios listed below applied, and manually recalculated submission data using the readings and seasonal adjusted daily shape values for the corresponding submissions. I compared my recalculation 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.	Has not occurred

Test	Scenario	Test Expectation	Result
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.	Process is compliant, no meter rollovers were identified
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
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.	Has not occurred
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant

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 25 months.

Audit commentary

Forward estimate is calculated by John Candy Consulting based on the average daily consumption for the previous read to read period for each meter register. If previous read period information is not available, the forward estimate consumption is based on the estimated daily consumption provided by the previous retailer in the CS file.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within $\pm 15\%$ and within $\pm 100,000$ 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
Sep 2019	-	-	-	-	25
Oct 2019	-	-	-	-	25
Nov 2019	-	-	-	-	25
Dec 2019	-	-	-	-	26
Jan 2020	-	-	-	-	26
Feb 2020	-	-	-	-	26
Mar 2020	-	-	-	-	25
Apr 2020	-	-	-	-	25
May 2020	-	-	-	-	25

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
Jun 2020	-	-	-	-	25
Jul 2020	-	-	-	-	25
Aug 2020	-	-	-	-	25
Sep 2020	-	-	-		25
Oct 2020	-	-	-		25
Nov 2020	-	-	-		25
Dec 2020	-	-	-		26
Jan 2021	-	-	-		27
Feb 2021	-	-	-		27
Mar 2021	-	-	-		27
Apr 2021	-	-			27
May 2021	-	-			27
Jun 2021	-	-			27
Jul 2021	-	-			27
Aug 2021	-				27
Sep 2021	-				28

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

Month	Revision 1	Revision 3	Revision 7	Revision 14
Sep 2019	0.20%	1.42%	0.85%	0.88%
Oct 2019	123.78%	134.65%	134.65%	134.65%
Nov 2019	-1.03%	22.75%	22.75%	22.75%

Month	Revision 1	Revision 3	Revision 7	Revision 14
Dec 2019	0.00%	0.00%	0.00%	0.00%
Jan 2020	22.56%	22.56%	22.56%	22.56%
Feb 2020	-2.20%	-2.17%	-2.15%	-2.15%
Mar 2020	1.76%	1.76%	1.76%	1.76%
Apr 2020	-0.96%	-0.99%	-0.97%	-0.97%
May 2020	-0.73%	145.86%	145.79%	145.79%
Jun 2020	28.58%	1071.19%	1657.19%	1657.23%
Jul 2020	0.14%	0.73%	55.14%	55.14%
Aug 2020	0.01%	39.04%	39.04%	39.05%
Sep 2020	0.06%	20.70%	20.62%	
Oct 2020	13.04%	12.99%	12.99%	
Nov 2020	0.23%	-0.48%	1.33%	
Dec 2020	-4.21%	-3.69%	1.07%	
Jan 2021	-0.14%	9.67%	9.67%	
Feb 2021	-0.40%	35.03%	35.05%	
Mar 2021	21.05%	11.46%	11.40%	
Apr 2021	-0.01%	39.18%		
May 2021	-3.64%	19.92%		
Jun 2021	0.93%	10.43%		
Jul 2021	9.22%	28.76%		
Aug 2021	14.34%			

Month	Revision 1	Revision 3	Revision 7	Revision 14
Sep 2021	0.27%			

I investigated the large percentage differences for August 2021, July 2021, May 2021, April 2021, February 2021, January 2021, August 2020, May 2020, January 2020, and October 2019 and found the differences were less than 2,000 kWh at balancing area level and due to the forward estimate being higher or lower than actual readings, and backdated switching activity. The large difference for June 2020 was caused by a backdated switch out.

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 15.3

Code related audit information

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

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

Audit observation

The event detail report was examined to identify all ICPs which had a profile change during the audit period.

Audit commentary

ICP 0000390158MP624 underwent a profile change from RPS to RPS PV1 on 13 August 2020, and change from RPS PV1 to HHR on 1 September 2020.

The change to RPS PV1 coincided with a meter change, and actual readings were obtained for removal and installation. The upgrade to HHR did not coincide with a meter change, but actual volumes were obtained for all trading periods.

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 33 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 33 months, and the table below shows that compliance has been achieved for all submissions apart from one NSP each for the November 2020, December 2020, and July 2021 revision 3. One ICP was supplied at each affected NSP and the requirements were not met because actual readings were not obtained by the time revision three was created.

Quantity of NSPs where revision targets were met

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Nov 2018			44	44
Dec 2018			47	47
Jan 2019			47	47
Feb 2019			47	47
Mar 2019			48	48
Apr 2019			49	49
May 2019			50	50
Jun 2019		50	50	50
Jul 2019		50	50	50
Aug 2019		50	50	50
Sep 2019		50	50	50
Oct 2019	50	50	50	50
Nov 2019	50	50	50	50
Dec 2019	51	51	51	51

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jan 2020	51	51	51	51
Feb 2020	51	51	51	51
Mar 2020	52	52	52	52
Apr 2020	52		52	52
May 2020	52		52	52
Jun 2020	52		52	52
Jul 2020	52		52	52
Aug 2020	52		52	52
Sep 2020	52			52
Oct 2020	52			52
Nov 2020	51			52
Dec 2020	52			53
Jan 2021	54			54
Feb 2021	54			54
Mar 2021	55			55
Apr 2021	56			56
May 2021	56			56
Jun 2021	57			57
Jul 2021	56			57

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
Nov 2018	-	-	100.00%
Dec 2018	-	-	100.00%
Jan 2019	-	-	100.00%
Feb 2019	-	-	100.00%
Mar 2019	-	-	100.00%
Apr 2019	-	-	100.00%
May 2019	-	-	100.00%
Jun 2019	-	100.00%	100.00%
Jul 2019	-	100.00%	100.00%
Aug 2019	-	100.00%	100.00%
Sep 2019	-	100.00%	100.00%
Oct 2019	100.00%	100.00%	100.00%
Nov 2019	100.00%	100.00%	100.00%
Dec 2019	100.00%	100.00%	100.00%
Jan 2020	100.00%	100.00%	100.00%
Feb 2020	100.00%	100.00%	100.00%
Mar 2020	100.00%	100.00%	100.00%
Apr 2020	100.00%	100.00%	100.00%
May 2020	100.00%	100.00%	100.00%
Jun 2020	100.00%	100.00%	100.00%
Jul 2020	100.00%	100.00%	100.00%

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Aug 2020	100.00%	100.00%	100.00%
Sep 2020	100.00%	100.00%	-
Oct 2020	100.00%	100.00%	-
Nov 2020	97.79%	100.00%	-
Dec 2020	95.87%	100.00%	-
Jan 2021	100.00%	100.00%	-
Feb 2021	100.00%	100.00%	-
Mar 2021	100.00%	100.00%	-
Apr 2021	100.00%	-	-
May 2021	100.00%	-	-
Jun 2021	100.00%	-	-
Jul 2021	99.89%	-	-

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 13.3 With: Clause 10 Schedule 15.3 From: Nov-20 r3, Dec-20 r3, Jul-21 r3</p>	<p>The 3-month historic estimate threshold was not met for one NSP each for three submissions. Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating
Low	Controls are strong and the impact is low. One ICP was supplied at the affected NSP, and readings were not obtained by the time revision three was produced. Reads were obtained in time for revision seven for November and December 2020.

Actions taken to resolve the issue	Completion date	Remedial action status
No action required		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>We endeavour wherever possible to replace legacy, non-communication meters and we chase up MEPs if they are not providing reads for any of their smart meters in an endeavour to get them to fix their communication issues. Where we are left with a non-communicating meter we will add it to our manual ammeter reading providers rounds.</p> <p>We will endeavour to ensure future situations and dealt with in a timely manner to ensure compliance.</p>	21/2/2022	

CONCLUSION

18 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, three CS files which contained incorrect actual readings appear as non-compliance in five sections.

The main area which requires improvement is CS accuracy. CS files are created manually, and a small number of errors were identified. Plus Energy changed their process to calculate average daily kWh to match the Registry Functional Specification which is expected to result in an immediate improvement in compliance.

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 24, which results in an indicative audit frequency of 12 months. The issues identified were generally minor and affected a very small number of ICPs. The rating is inflated by three CS files which contained incorrect actual readings, which appeared as non-compliance in five sections.

Considering this result along with the fact that all issues have a low audit risk rating and the small number of ICPs affected by the non-compliances and currently supplied, I recommend that the next audit is due in

PARTICIPANT RESPONSE

Our CS accuracy has been highlighted as requiring improvement on two fronts, one being date accuracy and the other being the average daily kWh usage.

A small number of date errors have occurred, these were due to human error, most were out by 1 day. Refresher training has been completed on this matter.

The average daily usage calculation errors identified are due to the way in which we have always calculated the daily average usage. That being the last billing period for a consumer or where the last billing period was less than a month, then for the previous billing period. We had previously been advised and trained on this method as it was believed to provide a more accurate average daily usage number than just using the last day of trading with us. We have already changed our process and have been using the last day of trading calculation as our average daily usage since this was pointed out to us by our auditor, we implemented this change on 15/1/2022.