

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT



For

PAUA TO THE PEOPLE

Prepared by: Tara Gannon

Date audit commenced: 26 January 2018

Date audit report completed: 7 February 2018

Audit report due date: 15 February 2018

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EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **Paua to the People (Paua)**, formerly known as Giving 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 7.1.

Paua's switching processes are completed manually using the registry. There has been an increase in switching activity; customer numbers have increased dramatically from 43 in March 2016 to 927 in January 2018, and Paua experienced high customer churn in winter 2017. The increased switching workload contributed to the small number of late and incorrectly processed files identified during the audit.

Paua supplies HHR AMI customers only, and relies on AMI reads provided by MEPS. I identified a small number of instances where Paua had applied the midnight AMI read for a switched in ICP, but that reading differed from the agreed switch reading.

Paua has endeavoured to improve their processes during the audit period. All recommendations made in the previous audit have been implemented, and four of the 13 previous non-compliances have been cleared.

This audit identified 15 non-compliances and makes one recommendation. I note that several of the non-compliances relate to minor data discrepancies affecting very small numbers of ICPs, which have now been resolved. Because these discrepancies affected compliance with several clauses, it was necessary to raise non-compliance in several sections of the report for the same issue. For instance:

- An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 had not been processed from the correct date. A correction had been processed and correct information will be submitted through the revision process. Non-compliance is recorded in **sections 2.1, 11.2, 11.4, 12.3, 12.7, and 13.1.**
- Injection volumes for 1001153549CKC64 were incorrectly classified as flow direction X for some submissions. Injection volumes will be omitted from future submissions and revisions because the generator has agreed to gift their energy to the market, and the reconciliation manager has been notified. Non-compliance is recorded in **sections 11.4, 12.7, and 13.1.**
- ICP 0000008330TRDC5 was moved to inactive status on 27/04/2017 in error, it should have remained at active status. A backdated correction was processed on 12/01/2018, and the ICP will correctly be included in revision submissions. Non-compliance is recorded in **sections 2.1, 3.9, 11.4, and 12.7.**
- ICPs 1001136871UND85 and 1001157086CK7D0 were missing from the aggregates temporarily because missing consumption was not estimated. Data has now been estimated and the ICPs will be correctly included in revision submissions. Non-compliance is recorded in **sections 2.1, 11.4, and 12.7.**

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 22, which results in an indicative audit frequency of 12 months. I have considered this result in conjunction with Paua's responses and recommend that the next audit is completed in 18 months. Paua has demonstrated that process improvements have been made to strengthen controls, and reduce the likelihood of recurrence of non-compliance.

The matters raised are shown in the tables 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	An incorrect NSP was temporarily recorded for one ICP. An incorrect status was temporarily recorded for three ICPs.	Strong	Low	1	Cleared
Changes to registry information	3.3	10 Schedule 11.1	Five late status updates.	Moderate	Low	2	Identified
Management of inactive status	3.9	19 Schedule 11.1	One ICP had an incorrect status code applied.	Moderate	Low	2	Identified
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	The "AA" (accept and acknowledge) was applied for one ICP with advanced metering installed.	Strong	Low	1	Identified
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	Two CS files contained incorrect readings.	Moderate	Low	2	Identified
Retailers must use same reading - standard switch	4.4	6(1) and 6A Schedule 11.3	The agreed switch read was not applied for three transfer switches.	Moderate	Low	2	Investigating
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	Switch event dates were earlier than the requested date for three switches.	Strong	Low	1	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Gaining trader changes to switch meter reading - switch move	4.11	12 Schedule 11.3	The agreed switch read was not applied for two switch moves. One RR request contained a requested reading inconsistent with the HHR data.	Moderate	Low	2	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	One withdrawal acknowledgement was two business days late.	Strong	Low	1	Identified
Electronic meter readings and estimated readings	9.6	17 Schedule 15.2	Meter event reports were not reviewed prior to January 2018, but are now reviewed and actioned weekly.	Strong	Low	1	Cleared
Calculation of ICP days	11.2	15.6	One NSP change was not processed from the correct date. Inactive ICP days are included in the ICP days submission.	Moderate	Low	2	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHR aggregates file does not contain electricity supplied information. Some data accuracy issues were identified. Paua's records have been updated, and the affected ICPs will be reported correctly on future submissions and revisions.	Strong	Low	1	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Allocation of submission information	12.3	15.5	Volumes were temporarily recorded against an incorrect NSP because an NSP change was processed from an incorrect date.	Strong	Low	1	Identified
Accuracy of submission information	12.7	15.12	Some data accuracy issues were identified. Most have now been resolved.	Moderate	Low	2	Identified
Provision of submission information to the RM	13.1	8 Schedule 15.3	Two ICPs temporarily had their data incorrectly aggregated.	Strong	Low	1	Identified
Future Risk Rating						22	

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
Retailers must use same reading	4.4	Replacement of agreed switch reads	Ensure that the agreed switch read is always applied, by not replacing switch reads with AMI data, unless an RR to change the switch read to match the AMI read is accepted.

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

The structure of the organisation was provided.

1.3. Persons involved in this audit

Auditor:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Paua personnel assisting in this audit were:

Name	Title
Mark Hughes	Managing Director

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

Paua receives HHR data from AMS as an MEP. There are no agents involved in the process.

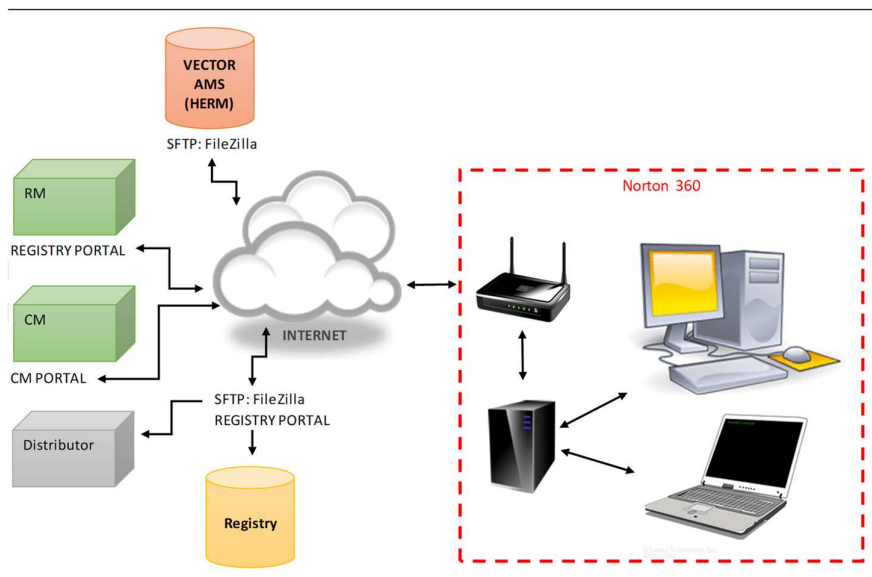
Audit commentary

Not applicable

1.5. Hardware and Software

Paua utilises the following software:

Task	Software	Notes
Security	Norton	Remote server has full security suite protection
SFTP/FTP	FileZilla	
Back-up	QNAP NAS (RAID1) OneDrive Remote server (UK based)	All key files are replicated across the NAS and Paua PCs constantly. Raw data tables are held in the cloud and on a remote server in the UK.
Disaster Recovery	OneDrive	Simultaneous back up of the NAS (RAID1), PC and laptop. Daily and monthly backup to OneDrive.
Browsers	Mozilla Firefox and Microsoft Edge	
Office	MS Office 365	
CRM/Billing	Bespoke .Net Application frontend to SQL Server customer usage tables.	



1.6. Breaches or Breach Allegations

There are no breach allegations recorded by the Electricity Authority between January 2017 to January 2018.

1.7. ICP Data

Paua provided a list file as at January 2018. The active ICPs from the list file are summarised by meter category in the table below:

Metering Category	Number of ICPs (2018)	Number of ICPs (2016)
1	920	454
2	-	-
3	-	-
4	-	-
5	-	-
9	-	-

Paua provided a list file as at January 2018 by status:

Status	Number of ICPs (2018)	Number of ICPs (2016)
Active (2,0)	920	454

Status	Number of ICPs (2018)	Number of ICPs (2016)
Inactive – new connection in progress (1,12)	-	-
Inactive – electrically disconnected vacant property (1,4)	1	1
Inactive – electrically disconnected remotely by AMI meter (1,7)	4	1
Inactive – electrically disconnected at pole fuse (1,8)	1	-
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)	1	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-	-
Inactive – reconciled elsewhere (1,5)	-	-
Decommissioned (3)	-	-

1.8. Authorisation Received

An authorisation letter was provided.

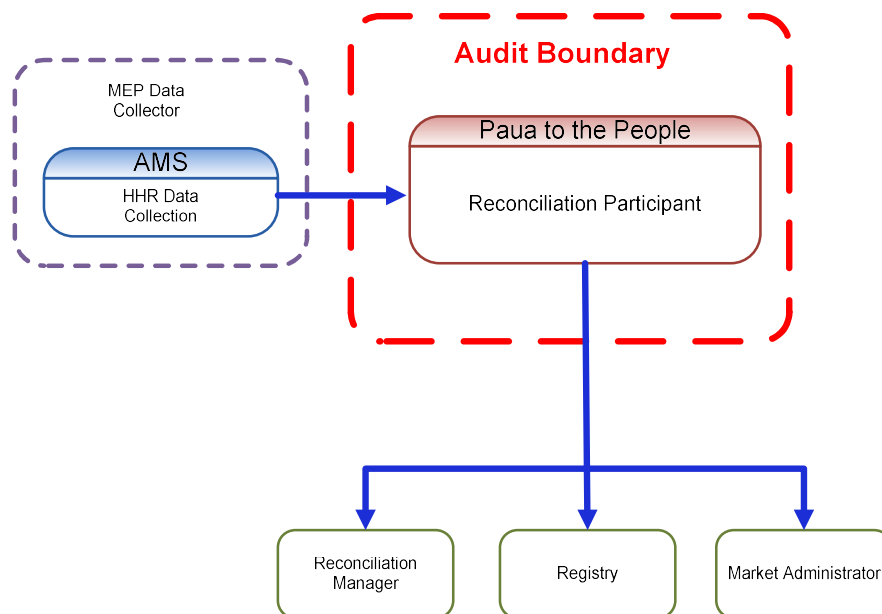
1.9. Scope of Audit

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

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

The audit was carried out at Paua's premises in Wellington on 26 January 2018.

The scope of the audit is shown in the diagram below, with the Paua audit boundary shown for clarity.



The table below shows the tasks under clause 15.38 of part 15 for which Paua requires certification. AMS provides AMI data as an MEP, not an agent.

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

1.10. Summary of previous audit

Paua provided a copy of their previous audit (as Giving Energy) conducted in February 2017 by Tara Gannon of Veritek Limited.

The audit found 13 non-compliances and made four recommendations. The summary tables below show the status of the non-compliances and recommendations. Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non-compliance	Remedial Action
Losing trader response to switch request	2.1.2	Clause 3 of Schedule 11.3	An incorrect AN response code was provided for three ICPs. AD (advanced metering) applied, but AA (accept and acknowledge) was used. AN notifications were provided one day late for two ICPs.	Still existing. Refer to section 4.2.
CS file content	2.1.4	Clause 5 of Schedule 11.3	There were two errors in CS file content, relating to reads and read types.	Still existing. Refer to section 4.3.
Read renegotiation	2.1.5	Clause 6 of schedule 11.3	148 RR files were sent late. One RR acknowledgement file was sent late.	Cleared for late RR files, but some issues exist. Refer to section 4.4.
Switch reads	2.1.5	Clause 6 of schedule 11.3	Paua has not consistently applied the correct switch read where read renegotiation has taken place.	Still existing. Refer to section 4.4.
Provision of final information	2.2.2	Clause 11 of schedule 11.3	There were two late CS files for move in switches.	Cleared. Refer to section 4.11.
Switch withdrawals	2.4	Clause 18 of Schedule 11.3	One late NW, and one late AW. An incorrect withdrawal code was used for one ICP.	Still existing. Refer to section 4.15.
Trader updates	2.8.3	Clause 10 of Schedule 11.1	20 late trader events on the Registry, due to late CS files from the losing trader.	Still existing. Refer to section 3.3.

Subject	Section	Clause	Non-compliance	Remedial Action
Management of active status	2.8.12	Clause 17 of Schedule 11.1	One status update to active for ICP 0000162504TR545 was recorded with an incorrect event date.	Cleared. Refer to section 3.9 .
Estimation of missing consumption data	4.1.2	Clause 15 of Schedule 15.2	Where actual half hour data is unable to be obtained, Paua does not consistently submit its best estimate of consumption in each applicable trading period.	Cleared. Refer to section 9.5 .
Replacement of estimated consumption data	4.1.2	Clause 15.12 of Part 15	Estimates are not consistently replaced with actuals where actual data becomes available, if Paua believes the difference is immaterial.	Cleared. Refer to section 8.2 .

Table of recommendations

Subject	Section	Clause	Recommendation	Status
RR processes	2.1.5	Clause 6 of schedule 11.3	Switch reads should be compared to the AMI read to ensure traders are using the same reading. If the reads do not match, and the requirements of clause 6 of schedule 11.3 are met, a RR should be requested.	Cleared. Refer to section 4.4 .
Withdrawal process	2.4	Clause 18 of schedule 11.3	Record withdrawal request and withdrawal rejection reasons against each ICP.	Cleared. Refer to section 4.15 .
Electricity supplied	5.3	Clause 15.7 of part 15	Monitor as billed versus submission volumes over the coming months. Investigate to confirm the reason for any significant variances between billed and submitted volumes.	Cleared. Refer to section 11.3 .
Submission information	6.1.3	Clause 15.2 of part 15	Compare volume and aggregate files prior to submission. If differences are larger than the expected rounding differences, investigate to find the source of the difference and make corrections as necessary.	Cleared. Refer to section 11.4 .

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

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

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

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

Audit observation

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

Audit commentary

Paua downloads an ICP List monthly and compares it against ICP details, including MEP, loss factor, multiplier, network, POC, and indicators of unmetered load. The check has recently been expanded to include ICP status.

The registry list was reviewed, and found:

Issue	2018 Qty	Comments
Blank ANZSIC codes	0	Compliant.
ANZSIC "T999" not stated	0	Compliant.
ANZSIC "T994" don't know	0	Compliant.
ANZSIC "T998 "response outside of scope"	0	Compliant.
UML load = zero	0	Compliant, no unmetered load was identified.
Incorrect UML load	0	Compliant, no unmetered load was identified.
No MEP recorded or nominated and UML= "N"	0	Compliant, all ICPs have NGCM as MEP.
Shared unmetered load incorrect	0	Compliant, no unmetered load was identified.

Issue	2018 Qty	Comments
ICPs with Distributor unmetered load populated but retail unmetered load is blank and UML flag = N	0	Compliant, no unmetered load was identified.
Incorrect profile	0	Compliant, all ICPs have HHR profile.
Active date variance with Initial Energisation Date	0	No new connections have been processed.
Active ICP with no MEP	0	Compliant, all ICPs have NGCM as MEP.
Active Category 9 and UML "N"	0	Compliant, all ICPs have metering category 1.

During review of status and submission information, four discrepancies between Paua's system and the registry were identified, and are recorded as non-compliance below:

- An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 had not been processed from the correct date. This issue was resolved during the audit.
- ICPs 0000168376TR8DB and 0000120713TROF0 were found to be active in Paua's system, but inactive on the registry. The updates had been missed due to human error. Both ICPs were genuinely active, and the registry was updated from the status change date as soon as practicable.
- ICP 0000008330TRDC5 was moved to inactive status on 27/04/2017 in error, it should have remained at active status. A backdated correction was processed on 12/01/2018, and the ICP will correctly be included in revision submissions.

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: Oct 2017</p> <p>To: Nov 2017</p>	<p>An incorrect NSP was temporarily recorded for one ICP.</p> <p>An incorrect status was temporarily recorded for three ICPs.</p> <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>Controls are rated as strong, as they ensure data is recorded correctly most of the time. The issues identified were caused by manual processing errors, and controls have been strengthened to prevent recurrence.</p> <p>The impact is low because only three ICPs were affected.</p> <ul style="list-style-type: none"> For the status discrepancies, the correct status was recorded in Paua's system, so submissions were correct. The discrepancy has now been corrected. For the NSP discrepancy, both NSPs were within the same balancing area, and the data was corrected. 		
Actions taken to resolve the issue		Completion date	Remedial action status
Status and NSP changes were corrected to the correct dates in the Registry.		8/2/2018	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Controls have been significantly strengthened over the period and we note that two of the errors occurred before the process was strengthened and the last change (1001147041CK514) had been picked up but the change was not to the correct date. The recent changes to our systems and processes will ensure that the correct date is applied where changes to the NSP occur.</p> <p>We consider that the controls in place are now adequate to ensure compliance.</p>		8/2/2018	

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 of prompt data correction where errors were identified.

Audit outcome

Compliant

2.3. Data transmission (Clause 20 Schedule 15.2)

Code reference

Clause 20 Schedule 15.2

Code related audit information

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

Audit observation

I reviewed the method to receive meter reading information.

I traced volumes for one month for five HHR ICPs from the source data to Paua's system and the HHR aggregates submissions.

Audit commentary

Read and volume data is received from AMS via SFTP.

I traced volumes for one month for five AMS HHR ICPs from the source data to Paua's system and the HHR aggregates submissions. The volumes matched the source data.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Audit observation

A complete audit trail was checked for all data gathering, validation and processing functions. I reviewed audit trails for a small sample of events.

Audit commentary

Audit trails are compliant, and data is retained as required by this clause.

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 Paua's Terms and Conditions, which apply to all customers supplied.

Audit commentary

Paua's Terms and Conditions include arrangements for meter access and shutdowns and these arrangements mention that other parties may be involved in certain processes.

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 Paua's Terms and Conditions, which apply to all customers supplied.

Audit commentary

Paua's Terms and Conditions include arrangements for meter access and shutdowns and these arrangements mention that other parties may be involved in certain processes. Paua 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 registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed.

Audit commentary

Paua has only supplied ICPs with metering category 1, and have not completed any new connections. No ICPs have required loss compensation.

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 Paua's Terms and Conditions, which apply to all customers supplied.

Audit commentary

Paua's terms and conditions have specific clauses covering this requirement.

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 registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 10.33(1)

Code related audit information

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

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

Audit observation

The registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 10.33A(1)

Code related audit information

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

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

Audit observation

The registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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. The process to validate and approve customer applications was observed.

Audit commentary

Paua only trades on the Wellington Electricity network, and has a Use of System Agreement with Wellington Electricity.

Before an application is accepted, ICPs are checked on the registry to confirm the network is Wellington Electricity.

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 MEP before an ICP can be created or switched in was checked. The process to validate and approve customer applications was observed.

Audit commentary

All Paua ICPs have AMS meters. Paua demonstrated that an arrangement is in place with AMS.

Before an application is accepted, ICPs are checked on the registry to confirm the MEP is AMS.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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 registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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 five business days after the change.

Audit observation

The process to manage status changes is discussed in detail in **sections 3.8** and **3.9**. In this section, the event detail report for 1/04/2017 to 1/01/2018 was analysed determine the overall performance for that period. All changes to status were reviewed.

Audit commentary

The timeliness of registry updates is reviewed in the table below:

Event	Year	Total ICPs	ICPs Notified Within 5 Days	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Change to active (2,0)	2017	5	5	-	1	100.0%
	2018	11	8	3	35	72.7%
Change to electrically disconnected vacant property (1,4)	2018	2	-	2	73	0.0%
Change to electrically disconnected remotely by AMI meter (1,7)	2018	15	15	-	1	100.0%

Event	Year	Total ICPs	ICPs Notified Within 5 Days	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Change to electrically disconnected at pole fuse (1,8)	2018	1	1	-	1	100.0%
Change to electrically disconnected at meter box switch (1,11)	2018	2	2	-	5	100.0%

The table above records that the Registry was not updated within five business days for:

- three of the 11 ICPs where the status had been updated to active
- both ICPs where the status had been updated to electrically disconnected vacant property.

All late status changes were reviewed. Late updates occurred for several reasons, including:

- backdated switches and late customer applications for status updates to active
- delays in receiving and processing disconnection information for status updates to inactive.

The late updates are recorded as non-compliance below.

No MEP changes occurred during the period. Paua ensures that AMS is the MEP before switching ICPs in.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 3.3</p> <p>With: Clause 10 Schedule 11.1</p> <p>From: April, October and December 2017</p>	<p>Five late status updates.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are adequate to ensure that the registry is updated on time most of the time, but there is room for improvement.</p> <p>The risk is low as a small number of updates were affected.</p>
Actions taken to resolve the issue	
Completion date	Remedial action status

Status changes were corrected to the correct dates in the Registry.	8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Since our Audit GIVE have;</p> <ol style="list-style-type: none"> 1. Upgraded our processes to embed status changes into the disconnection process; and 2. Changed our reconciliation processes and system to capture any variance between status on our systems and the Registry. The process change ensures that variances are picked up and can be investigated and corrected before any reports are submitted to the Reconciliation Manager. <p>We suggest that the controls now in place should be considered as strong.</p>	8/2/2018	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

Audit observation

The registry list and event detail reports for the period from 1/04/2017 to 1/01/2018 were reviewed to:

- identify all new connections during the period
- identify all decommissions during the period
- identify all MEP nominations during the period; and

- confirm whether all active, metered ICPs have an MEP recorded.

Audit commentary

No new connections or decommissions were completed, and no MEP nominations were made.

Review of the registry list confirmed that all active ICPs have an MEP recorded. Paua do not supply any ICPs with unmetered load.

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 registry list and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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 was reviewed to check ANZSIC codes.

Audit commentary

All active ICPs have a valid ANZSIC code recorded. None have an ANZSIC code recorded as T994 “Don’t know” or blank.

Audit outcome

Compliant

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

Code reference

Clause 9(1)(f) of Schedule 11.1

Code related audit information

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

- *the code ENG - if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or*
- *the daily average kWh of unmetered load at the ICP - in all other cases (clause 9(1)(f)(ii)).*

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list with history for 1/04/2017 to 1/01/2018 was reviewed to identify all unmetered load.

Audit commentary

Paua does not supply any ICPs with unmetered load, and does not intend to.

Before accepting a customer application, Paua checks the registry to determine whether any unmetered load is connected. If a customer is found to have unmetered load, their application will be declined.

Unmetered load details are checked as part of the monthly validation against the registry. If unmetered load is discovered for an existing customer, the ICP will be switched out.

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 managed by the relevant trader and indicates that:

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

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

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

Audit observation

The reconnection process was examined. The event detail report for 1/04/2017 to 1/01/2018 was analysed. The findings in relation to the timeliness of updates to registry are recorded in **section 3.3**.

A typical sample of five reconnected ICPs were checked using the typical characteristics methodology.

Audit commentary

Paua has not completed any new connections, but has updated ICP status to active where ICPs have been reconnected.

11 ICPs had status changes to active during the audit period; all had final certified metering installations in place. I reviewed the status codes and reconnection dates for the sample of five reconnections, and confirmed that they had been applied appropriately.

Late registry updates to active are recorded as a non-compliance in **section 3.3**, and two active ICPs with temporary status discrepancies are recorded as non-compliance in **section 2.1**.

Paua’s system only allows one active customer account per ICP.

Audit outcome

Compliant

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The disconnection process was discussed. The event detail report for 1/04/2017 to 1/01/2018 was analysed to identify all disconnections during the period.

A typical sample of five ICPs at each inactive status (or all ICPs if less than five were available) were checked using the typical characteristics methodology.

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

Audit commentary

20 ICPs were disconnected during the audit period.

I reviewed the reason codes and disconnection dates for the sample of 10 disconnections:

- For nine ICPs, the dates and codes applied were correct.
- ICP 0000008330TRDC5 was moved to inactive status on 27/04/2017 in error, but should have remained at active status. This is recorded as non-compliance below. A backdated correction was processed on 12/01/2018, and the ICP will correctly be included in revision submissions.

Late registry updates are recorded as a non-compliance in **section 3.3**. Paua have implemented checks to ensure that status discrepancies are more promptly identified, as discussed in **section 2.1**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.9 With: Clause 19 Schedule 11.1 From: 27-Apr-17 To: 12-Jan-18	One ICP had an incorrect status code applied. It has now been corrected and will be reported correctly for revision submissions. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate as they are sufficient to prevent the risk of incorrect status codes being applied most of the time. The risk rating is low as only one ICP was affected, and it was a manual processing error.		
Actions taken to resolve the issue		Completion date	Remedial action status
Status update was corrected. The change will be picked up in the next revision of the reconciliation reports.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Since our Audit GIVE have; <ol style="list-style-type: none"> 1. Upgraded our processes to embed status changes into the disconnection process; and 2. Changed our reconciliation processes and system to capture any variance between status on our systems and the Registry. The process change ensures that variances are picked up and can be investigated and corrected before any reports are submitted to the Reconciliation Manager. We consider that the controls in place are now adequate to ensure compliance		8/2/2018	

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

The registry list with history and event detail reports for 1/04/2017 to 1/01/2018 were reviewed to identify all new connections.

Audit commentary

Paua has not completed any new connections, and does not intend to. Compliance was not assessed.

Audit outcome

Not applicable

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 1 or more profile codes associated with that ICP.

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

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

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

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

Audit observation

An event detail report for 1/04/2017 to 1/01/2018 was reviewed to:

- identify AN files issued by Paua during the period; and
- assess compliance with the setting of event dates requirement.

All AN response codes were reviewed to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

The switch breach report confirmed all AN files were sent within the allowable timeframes.

Event dates set by losing trader must be no more than 10 business days after receipt of an NT file. Over a 12 month period 50% of event dates must be within five business days. The event detail report was examined; there were no ICPs with switch dates greater than 10 business days, and 97.8% of switches occurred within five business days.

Total transfer switches	Backdated switches	Total within 10 days	Total within 5 days	% within 5 days
137	-	137	134	97.8%

The 2016 audit found some AN files had the AA (accept and acknowledge) code applied, when they should have had AD (advanced metering). I reviewed all AN codes against the registry list information. I found one case where incorrect response code was applied; ICP 0000000201TR27C (02/11/2017) had the AA code applied, when advanced metering was installed. This is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: Clauses 3 and 4 Schedule 11.3 From: 02-Nov-17 To: 02-Nov-17	The "AA" (accept and acknowledge) was applied for one ICP with advanced metering installed. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	Controls are rated as strong, and the risk is assessed as low. Only one exception was identified, and it was due to human error.

Actions taken to resolve the issue	Completion date	Remedial action status
No further action possible.	8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
This one occurrence happened due to a keying error. We consider that the controls in place are adequate to ensure compliance.	8/2/2018	

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 five 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

An event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed, to identify CS files issued by Paua.

The accuracy of the content of transfer CS files was confirmed by checking a sample of five records. The content checked included:

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

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

Audit commentary

The switch breach report confirmed all CS files were sent within the allowable timeframes.

The content of CS files was examined. For two transfer switch ICPs, Paua's CS contained incorrect readings due to human error. All other CS information checked was correct.

ICP	Meter	Paua's CS Read	HHR meter reading data	Difference (expected read – CS read)	Comments
0000084370TRBC5	215302810/1	2910 (E)	2915 (E)	-43 kWh	The CS contained readings for the day prior to the correct date, due to a manual processing error.
	215302810/2	11340 (E)	11362 (E)		
	215302810/3	9726 (A)	9742 (A)		
0000160775TR51A	212382354/1	17670 (A)	20723 (A)	3053	The reading for register 2 was recorded against register 1, and the reading for register 2 was not recorded, due a manual processing error.
	212382354/2	0 (A)	17670 (A)	17670	

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.3</p> <p>With: Clause 5 Schedule 11.3</p> <p>From: June and August 2017</p>	<p>Two CS files contained incorrect readings.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate as they are sufficient to ensure CS data is correct most of the time. The exceptions occurred during a period of very high workload and were manual processing errors.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action taken.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>GIVE made improvements to our systems during the year to have closing reads displayed on the CS required notification. Since introducing the new system in August 2017 no further errors have occurred.</p> <p>We consider that the controls in place are strong and are adequate to ensure compliance.</p>		8/2/2018	

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The process for the management of read requests was examined.

The event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed to identify all read change requests and acknowledgements.

A diverse characteristics sample of eight read change requests for transfer switches were reviewed to confirm that information provided in the request was correct, and that the reads recorded in Paua's system were consistent with the acceptance or rejection provided by the other retailer.

All read changes for transfer switches issued by other retailers were reviewed, to ensure that they had been handled correctly.

A typical sample of five gained ICPs with estimated CS reads where an RR was not processed were reviewed, to confirm whether the correct read was applied.

The switch breach history report for the audit period was reviewed, to identify late read change and acknowledgement files.

Audit commentary

Paua only supplies ICPs with AMS advanced meters. On switch in, switch reads are compared to AMI readings received from AMS. Where the reading is different, Paua issues a read change request as soon as possible. These read change requests normally meet the requirements of 6(2) and (3) Schedule 11.3, and are required to be accepted by the losing retailer.

Paua imports all AMI reads available. Where there is more than one read on the same day, Paua retains the AMI reading and removes the other reading. This means that if the AMI read differs from the switch reading, and an RR has not been issued and accepted, Paua will not use the agreed switch reading. Where AMI reads are not available, I found CS switch reads and read changes were applied correctly. I

recommend that Paua considers actual and estimated switch reads in their read reconciliation process, to ensure that these are not overwritten by AMI data.

Description	Recommendation	Audited party comment	Remedial action
Replacement of agreed switch reads	Ensure that the agreed switch read is always applied, by not replacing switch reads with AMI data, unless an RR to change the switch read to match the AMI read is accepted.	<p>Given the need to ensure that raw data flows through correctly from HH data supplied by our MEP to the reconciliation we are not sure that forcing our systems to match an estimated/incorrect opening read supplied by the losing retailer would not make us non-compliant in other areas of the Code.</p> <p>GIVE complete RR switches daily to minimise non-acceptance of our RR switches. We note that several other retailers are providing inaccurate "Actual" reads and this has resulted in some problems getting acceptance of accurate Actual Reads.</p>	Investigating

Paua issued 108 read change requests for transfer switches. Paua does not always have the first "midnight reading" for time of switch in, but this is calculated by subtracting 48 half hour values from the midnight reading for the second day. I consider this meets the requirement to "provide the losing trader with a switch event meter reading obtained from an interrogation of a certified metering installation ...".

A sample of eight read change requests issued by Paua were reviewed, including four rejected by the other retailer, and four accepted by the other retailer.

- for seven of the read change requests, the correct reads were provided in the RR file and recorded in Paua's system.
- for ICP 0000076842TR96A, the RR was validly rejected but the read in Paua's system matched the AMI data and read change request, not the agreed switch read. This is recorded as non-compliance below.

ICP	CS Read	HHR meter reading data	Paua RR request	Paua's system read	Expected read	Difference (expected read – system read)
0000076842TR96A	24826	24830	24830	24830	24826	-4 kWh

Both read change requests issued to Paua were reviewed. One was processed correctly. For ICP 0000084370TRBC5, Paua's CS had been processed incorrectly and contained the reads for the day before the expected date. This is recorded as non-compliance in **section 4.3**. Paua had not identified

that the RR was rejected; if so, they would have followed their normal process to discuss the rejected RR with the other retailer to gain acceptance. It was expected that the CS read would be applied because the RR was rejected, but the AMI reading was applied in Paua's system.

ICP	Paua's CS Read	HHR meter reading data	Other retailer RR request	Paua's system read	Expected read	Difference (expected read – system read)
0000084370TRBC5	2910 (E) 11340 (E) 9726 (A)	2915 (E) 11362 (E) 9742 (A)	2317 (E) 11340 (E) 9726 (E)	2915 (E) 11362 (E) 9742 (A)	2910 (E) 11340 (E) 9726 (A)	-43 kWh

Recently, Paua implemented process improvements to ensure that rejected RR files are identified promptly, investigated, and followed up with the other retailer. Process documentation was provided to confirm the revised process.

I reviewed a typical sample of five ICPs (including transfer switches and switch moves) which switched in on estimated readings with no RR issued, to determine whether they were treated correctly.

- In four cases, the reads in Paua's system matched the CS file as no AMI data was available or the estimate was consistent with the AMI data.
- For ICP 0000076842TR96A, the read in Paua's system matched the AMI file and not the CS, resulting in under reporting of 3 kWh. An RR was not sent due to human error during a period of high workload.

ICP	CS Read	HHR meter reading data	Paua RR request	Paua's system read	Expected read	Difference (expected read – system read)
0000076842TR96A	26018	26021	-	26021	26018	-3 kWh

The 2017 audit identified that Paua was not using the same read as the losing trader for ICPs 0000026382TREFF and for 0000077827TRA75. I followed these up during the audit and found that the reads had not been corrected because of Paua's AMI read processes, and the 14 month allocation has now passed. The net volume over reported for the two ICPs was 204 kWh.

The switch breach report did not record any late read change or acknowledgement files.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.4</p> <p>With: Clause 6(1) and 6A Schedule 11.3</p> <p>From: July 2017</p>	<p>The agreed switch read was not applied for three transfer switches.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>

Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as moderate, because in most cases RRs were treated correctly. In most cases RR requests issued meet the requirements of Clause 6(2) and (3) Schedule 11.3, which the losing trader is required to accept. If a switch read is estimated the issue does not occur.</p> <p>The breach risk rating is low, as the total under reported was 50 kWh. Process improvements have been made to reduce the likelihood of incorrect treatment of rejected RR files.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>GIVE has recently added functionality to highlight when RR reads have been rejected which will enable us to follow up any rejections of our RR Switches. We would like to note that our RR Switches are all based on actual data supplied to us by the MEP (Vector AMS). Rejections of our RR Reads tend to occur for reasons outside our control including;</p> <ol style="list-style-type: none"> 1. Where the losing retailer has provided an incorrect "Actual Read" – we have already raised this with the EA but it still causes issues when these traders refuse to accept a different (correct) actual read. 2. Late delivery of data by the MEP (to be fair this has improved over the year) which allows the losing retailer to reject the read because it is late 3. Where the losing trader has drawn out the switch so long that they reject the Actual Read because it is late <p>Storing incorrect opening reads in systems that are designed to be very accurate in reads and HH data will cause us problems.</p> <p>GIVE also do not understand how to reconcile incorrect reads for ICP on HHR profiles as HH data needs to match the raw data supplied by the MEP.</p>		8/2/2018	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
With the changes already made to our systems we consider that the controls in place are strong and are adequate to ensure compliance.		8/2/2018	

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed to identify all read change requests and acknowledgements where clause 6(2) and (3) of schedule 11.3 applied.

Audit commentary

Paua issued 87 read change requests where clause 6(2) and (3) of schedule 11.3 applied. All were accepted by the other retailer apart from ICPs 0000068068TR682 and 0001454399UN6A1, which subsequently had their switches withdrawn.

No read change requests where clause 6(2) and (3) of schedule 11.3 applied were issued to Paua by other retailers.

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

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.3

Code related audit information

The switch move process applies where a gaining trader has an arrangement with a customer or embedded generator to trade electricity at an ICP using non half-hour metering or an unmetered ICP, or

to assume responsibility for such an ICP, and no other trader has an agreement to trade electricity at that ICP, this is referred to as a switch move and the following provisions apply:

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

10(1) Within five business days after 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:*
 - *confirmation of the switch event date; and*
 - *a valid switch response code; and*
 - *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—*
 - *is not earlier than the gaining trader’s proposed event date, and*
 - *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 process to manage the sending of switch information within five business days of the event date was examined.

An event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed, to identify AN files issued by Paua during the audit period. All AN response codes were reviewed to determine whether the codes had been correctly applied.

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

Audit commentary

The switch breach report confirmed all AN files were sent within the allowable timeframes.

I reviewed all 80 switch moves, and found that all were sent within 10 business days after receipt of the losing trader's NT.

For three switch moves, the proposed event date was before the losing trader's proposed date. This is recorded as non-compliance below. I investigated the reasons for the early proposed events dates and found that all were ICPs that Paua had declined to supply.

I reviewed all AN codes against the registry list information. I specifically checked whether the AA code was only used when none of the other codes were relevant. The correct AN codes were applied for all switch moves.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.8 With: Clause 10(1) Schedule 11.3 From: 31-Mar-17 To: 25-Jun-17	Switch event dates were earlier than the requested date for three switches. 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. No instances of incorrect event dates were identified after 25/06/2017 for switch moves, and the early dates were set for valid reasons. The impact is assessed as low, because the differences were all less than three days, and resulted in Paua's period of supply being removed.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action taken as GIVE was the losing retailer.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

<p>We changed our disconnection process to ensure this no happens. There have been no instances since the change in process in August 2017.</p> <p>With the changes already made to our systems we consider that the controls in place are strong and are adequate to ensure compliance.</p>	8/2/2018	
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4.9. Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)

Code reference

Clause 10(2) Schedule 11.3

Code related audit information

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

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

Audit observation

The setting of event dates for move switches was examined. The event detail report for 1/04/2017 to 1/01/2018 was examined, comparing the NT requested event date with the AN event date sent by Paua for any switches dated earlier than the NT requested date. The report was also checked for any event dates that were set greater than ten days from the NT receipt date.

Audit commentary

Analysis found no ICPs where the event date was set greater than ten days after the NT receipt date.

For three switch moves, the proposed event date was before the losing trader's proposed date. This is recorded as non-compliance in **section 4.8**. The affected switches were completed using Paua's proposed event date, and a valid switch response code and final information were provided.

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

An event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed, to identify CS files issued by Paua.

The accuracy of the content of transfer CS files was confirmed by checking a sample of five records. The content checked included:

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

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

Audit commentary

The switch breach report confirmed all CS files were sent within the allowable timeframes.

The content of CS files was examined, and found to be correct.

Audit outcome

Compliant

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

Code reference

Clause 12 Schedule 11.3

Code related audit information

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

- *if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or*
- *if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter reading. In this case, the gaining trader, within four calendar months of the actual event date, must provide to the losing trader a changed validated meter reading or a permanent estimate supported by two validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):*
- *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 five business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading (clause 12(2B)).*

Audit observation

The process for the management of read requests was examined.

The event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed to identify all read change requests and acknowledgements.

A diverse characteristics sample of 10 read change requests for switch moves were reviewed to confirm that information provided in the request was correct, and that the reads recorded in Paua's System were consistent with the acceptance or rejection provided by the other retailer.

All read changes for switch moves issued by other retailers were reviewed, to ensure that they had been handled correctly.

The switch breach history report for the audit period was reviewed, to identify late read change and acknowledgement files.

Audit commentary

The process for read changes is the same for transfer switches and switch moves, and is discussed in detail in **section 4.4**.

Both read change requests issued to Paua were reviewed and found that the reads in Paua's system were consistent with the correct values.

Paua issued 22 read change requests for switch moves. A sample of 10 read change requests issued by Paua were reviewed, including four rejected by the other retailer and six accepted by the other retailer.

- In eight cases, Paua had the correct reads recorded in their system, and in nine cases the reads provided in their RR files were correct.
- Non-compliance is recorded for two ICPs, where Paua's RR was validly rejected and Paua applied the read in the HHR data file instead of the CS reading. For ICP 0000057447TR044, the RR reading was also miskeyed when processing the RR.

Recently, Paua implemented process improvements to ensure that rejected RR files are identified promptly, investigated, and followed up with the other retailer. Process documentation was provided to confirm the revised process.

ICP	CS Read	HHR meter reading data	Paua RR request	Paua's system read	Expected read	Difference (expected read – system read)
0000012989TRD8D	9306	9319	9319	9319	9306	-13 kWh
0000057447TR044	22590	22599	22535	22599	22590	-9 kWh

The switch breach report did not record any late read change or acknowledgement files.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.11</p> <p>With: Clause 12 Schedule 11.3</p> <p>From: May and December 2017</p>	<p>The agreed switch read was not applied for two switch moves.</p> <p>One RR request contained a requested reading inconsistent with the HHR data.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as moderate, because in most cases RRs were treated correctly. In most cases RR requests issued meet the requirements of Clause 6(2) and (3) Schedule 11.3, which the losing trader is required to accept. If a switch read is estimated the issue does not occur.</p> <p>The breach risk rating is low, as the total under reported was 22 kWh. Process improvements have been made to reduce the likelihood of incorrect treatment of rejected RR files.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
See comments for 4.4 above.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>GIVE made improvements to our systems during the year to have closing reads displayed on the CS required notification. Since introducing the new system in August 2017 no further errors have occurred.</p> <p>With the changes already made to our systems we consider that the controls in place are strong and are adequate to ensure compliance.</p>		8/2/2018	

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

Code reference

Clause 13 Schedule 11.3

Code related audit information

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

- a half hour metering installation (that is not a category 1 or 2 metering installation) at an ICP with a submission type of half hour in the registry and an AMI flag of "N"; or

- a half hour metering installation at an ICP that has a submission type of half hour in the registry and an AMI flag of "N" and is traded by the losing trader as non-half hour; or
- a non half hour metering installation at an ICP at which the losing trader trades electricity through a half hour metering installation with an AMI flag of "N".

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

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

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

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

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

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

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

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

Audit observation

An event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

HH switching is unlikely to occur because metering will be AMI. No HH switches occurred during the audit period.

Audit outcome

Not applicable

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

Code reference

Clause 15 Schedule 11.3

Code related audit information

Within three business days after the losing trader is informed about the switch by the registry 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

An event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

HH switching is unlikely to occur because metering will be AMI. No HH switches occurred during the audit period.

Audit outcome

Not applicable

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

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

An event detail report for the period from 1/04/2017 to 1/01/2018 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

HH switching is unlikely to occur because metering will be AMI. No HH switches occurred during the audit period.

Audit outcome

Not applicable

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

Code reference

Clauses 17 and 18 Schedule 11.3

Code related audit information

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

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

- for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):*

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

Audit observation

The switch withdrawal process was examined.

The event detail report for 1/04/2017 to 1/01/2018 was analysed to identify all switch withdrawal requests (NW) and acknowledgements (AW).

The switch breach report was checked for any late NW and AW files. The event detail report was also analysed to confirm timeliness of switch withdrawal acknowledgements.

The content of a diverse characteristics sample of switch withdrawal requests was reviewed, including two (or all if less than two were available) with each withdrawal code applied.

Audit commentary

21 NWs were issued by Paua. Nine were checked, and the correct withdrawal code was applied in all cases. Ten withdrawal requests had the code CX (customer cancellation); all were requested after the switch was completed.

82 AW files were sent by Paua; 81 were sent within five business days of the NW receipt date. The AW for ICP 0000173399TRABE was sent two business days late. This is recorded as non-compliance below. The customer signed up with two retailers at the same time, and Paua worked with the customer and other retailer to confirm who the ICP should be with before sending the AW accepting the withdrawal. All NWs were sent within two calendar months of the event date.

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

11 NWs issued by another retailer were rejected, and 71 were accepted. I reviewed the rejected NWs and found they were rejected for valid reasons.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.15</p> <p>With: Clauses 17 and 18 Schedule 11.3</p> <p>From: 10-Jul-17</p> <p>To: 12-Jul-17</p>	<p>One withdrawal acknowledgement was two business days late.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice previously</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong as they are sufficient to mitigate risk most of the time. Only one AW was sent late.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action taken as GIVE never supplied the customer.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>GIVE always seeks to provide a good switching experience to our customers.</p> <p>NW switches are sometimes difficult to obtain confirmation of the customers desire to reverse the switch in a timely fashion. In our experience we have noted numerous instances where losing retailers send an NW without explicit consent from the Customer. Often this is due to a “misunderstanding” from the losing retailer – especially where a dual fuel customer is only switching their electricity.</p> <p>Accepting an NW then attempting to reverse it (starting the switch process again) is a very poor experience for customers.</p> <p>We have now changed our processes to accept NW if the customer has not responded.</p> <p>With the change already made to our processes we consider that the controls in place are strong and are adequate to ensure compliance.</p>		8/2/2018	

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

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

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

Audit outcome

Compliant

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

Code reference

Clause 11.15AA to 11.15AB

Code related audit information

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

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

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

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

Audit observation

The Electricity Registry switch save protected retailer list was examined.

Win-back processes were examined to determine whether they are compliant. The event detail report for 1/04/2017 to 1/01/2018 was analysed to identify all withdrawn switches with a CX code applied prior to the switch completion date for any switch save protected retailer.

Audit commentary

Paua has been a save protected retailer since 15/01/2015.

Paua emails the customers for ICPs requested by another retailer only to confirm that the switch request is valid, and if they have any comments on why they decided to switch. I saw examples of these emails. No win-back activity is initiated with lost customers.

The event detail report identified ten CX coded switch withdrawal requests; all were sent after the switch was completed.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

11.14(2) - The distributor must 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 identify and monitor unmetered load was discussed. The registry list for 1/04/2017 to 1/01/2018 was reviewed to identify all unmetered load.

Audit commentary

Paua does not supply any ICPs with shared unmetered load, and does not intend to.

Processes to prevent ICPs with unmetered load from switching in, and to monitor existing ICPs for addition of unmetered load 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 process to identify and monitor unmetered load was discussed. The registry list for 1/04/2017 to 1/01/2018 was reviewed to identify all unmetered load.

Audit commentary

Paua does not supply any ICPs with shared unmetered load, and does not intend to.

Processes to prevent ICPs with unmetered load from switching in, and to monitor existing ICPs for addition of unmetered load are discussed in **section 3.7**.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list for 1/04/2017 to 1/01/2018 was reviewed to identify all unmetered load.

Audit commentary

Paua does not supply any ICPs with shared unmetered load, and does not intend to.

Processes to prevent ICPs with unmetered load from switching in, and to monitor existing ICPs for addition of unmetered load are discussed in **section 3.7**.

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 process to identify and monitor unmetered load was discussed. The registry list for 1/04/2017 to 1/01/2018 was reviewed to identify all unmetered load.

Audit commentary

Paua does not supply any ICPs with shared unmetered load, and does not intend to.

Processes to prevent ICPs with unmetered load from switching in, and to monitor existing ICPs for addition of unmetered load are discussed in **section 3.7**.

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 for distributed generation were reviewed. A registry list was examined to confirm whether Paua had supplied any ICPs with generation during the audit period.

Audit commentary

Paua normally declines applications to supply customers with distributed generation. ICP 1001153549CKC64 was accepted from 25/09/2017, because the customer agreed to gift their generated energy. Paua confirmed that they had notified the reconciliation manager that they do not expect payment from the clearing manager for any electricity generated.

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

Paua did not identify any examples of bridged meters during the audit period. All ICPs have metering installed, and electricity is quantified according to the code.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

The participant responsible for the metering installation must:

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

Audit observation

The NSP table was reviewed.

Audit commentary

Review of the NSP table confirmed that Paua is not responsible for any GIPs. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

The registry list for 1/04/2017 to 1/01/2018 was reviewed, to identify any ICPs with profiles that require certification of the control device.

Audit commentary

Paua only uses the HHR profile, which does not require a certified control device.

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.

Paua identified one potentially defective meter during the audit period. It was reviewed to determine whether the MEP was advised and if appropriate action was taken.

Audit commentary

Defective meters are typically identified through the meter reading validation process, or from information provided by the MEP. Upon identifying a possible defective meter, Paua raises a field services job to investigate.

A potential defective meter for ICP 0000052492TR769 was identified through Paua's validation processes. The defect was a communication issue, and the MEP was advised. Where possible, data was replaced with actuals once communication was restored. Data for part of the missing period could not be retrieved and was estimated based on the switch files and midnight readings provided by AMS. The estimation process is discussed in **section 9.4**.

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:

- ensure the system is to within +/- 5 seconds of NZST or NZDST*
- compare the meter time to the system time*
- determine the time error of the metering installation*
- if the error is less than the maximum permitted error, correct the meter's clock*
- if the time error is greater than the maximum permitted error then:*
 - correct the metering installation's clock*
 - compare the metering installation's time with the system time*
 - correct any affected raw meter data.*
- 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

HHR data is provided by AMS as an MEP. Interrogation requirements and clock synchronisation were reviewed as part of the MEP audit.

Audit commentary

Fulfilment of the interrogation systems requirements was examined as part of the MEP audit, and found to be compliant. Only the MEPs can interrogate the meters where Paua is the trader.

Paua had not received notification of any clock synchronisation events outside the maximum permissible errors during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

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

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

Audit observation

Processes for the derivation of meter readings were reviewed.

Audit commentary

All meter readings are received from the MEP from the services interface, or via the switching process. Paua does not complete any manual readings, nor does Paua accept customer readings.

Identification of readings is discussed in **section 9.1**.

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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Code reference

Clause 9(1) and (2) Schedule 15.2

Code related audit information

In relation to each NSP, each reconciliation participant must ensure that for each NHH ICP at which the reconciliation participant trades continuously for each four 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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Code reference

Clause 10 Schedule 15.2

Code related audit information

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

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

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

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

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

Audit observation

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Code reference

Clause 11(1) Schedule 15.2

Code related audit information

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

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

Audit observation

HHR data is provided by AMS as an MEP.

Audit commentary

AMS is responsible for HHR data collection, and this is reviewed as part of their audit.

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

HHR data is provided by AMS as an MEP.

Audit commentary

AMS is responsible for HHR interrogation data requirements, and this is reviewed as part of their audit.

Audit outcome

Compliant

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

HHR data is provided by AMS as an MEP.

Audit commentary

AMS is responsible for HHR interrogation log requirements, and this is reviewed as part of their audit.

Audit outcome

Compliant

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

HHR data is provided by AMS as an MEP. HHR volume information was reviewed to confirm trading period duration.

Audit commentary

AMS is responsible for trading period duration, and this is reviewed as part of their audit. Review of HHR volume data for five ICPs confirmed that trading period duration is 30 minutes.

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.

I traced volumes for one month for ten ICPs from the source data to Paua's system and the HHR aggregates submissions.

Audit trails were reviewed in **section 2.4**.

Audit commentary

Paua intends to retain meter reading data for over 48 months. I viewed the earliest meter readings recorded in Paua's system, which matched the switch in date for their earliest customer on 23/01/2015.

I traced volumes for one month for five AMS HHR ICPs from the source data to Paua's system and the HHR aggregates submissions. The reads and volumes matched the source data. This confirmed that the reads had not been modified.

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

No non metering information is collected by Paua.

Audit outcome

Compliant

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

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

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

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

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

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

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

Audit observation

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Code reference

Clause 19(2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

Processes for correction of HHR meter readings were reviewed, including review of process documentation.

Audit commentary

No examples of corrections were identified during the audit period, but estimates were created where data was missing. The estimation process is discussed in **section 9.4**.

If actual data becomes available after data has been estimated, it is automatically imported into Paua's system. Duplicate readings for the same trading period are detected through read reconciliations, completed weekly, monthly (for the previous month), and periodically for periods more than one month ago. If there is a duplicate for a trading period, the estimated readings are removed.

Where an NT request has been received for an ICP, Paua continues to import read data. Once the switch is completed, an end date is recorded. Paua identifies reads after the end date through the read reconciliation process, and then removes them. I viewed an ICP in the process of switching out in the system, and noted that reads continued to be imported, and that no end date had been entered.

The non-compliances raised in the 2017 audit relating to replacement of estimate readings, and failure to import readings after an NT is received have both been cleared.

Audit outcome

Compliant

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

Code reference

Clause 19(3) Schedule 15.2

Code related audit information

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

Audit observation

The registry list for 1/04/2017 to 1/01/2018 was reviewed.

Audit commentary

Paua has only supplied ICPs with metering category 1, and has not completed any new connections. No ICPs have required loss compensation.

Audit outcome

Not applicable

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

Code reference

Clause 22(1) and (2) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Corrections are discussed in **section 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 is collected by AMS; data retention was reviewed as part of their MEP audits.

Audit commentary

Raw meter data is held by the MEP. Paua only corrects working data and they keep 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

Provision of estimated reads to other participants during switching was reviewed in **sections 4.3, 4.4, 4.5, 4.10 and 4.11.**

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

Audit commentary

Readings are clearly identified in Paua's systems.

Audit outcome

Compliant

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

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

Processes for derivation of volumes were discussed and observed.

Audit commentary

All reads are received from the MEP from the services interface, or via the switching process. Paua does not complete any manual readings, or accept customer readings.

Where AMI readings are received, volumes are sourced from the AMI metering information. Where an estimated or switch reading is used, the HHR volumes are derived from actual readings or estimates.

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

HHR data is provided by AMS as an MEP.

I traced volumes for one month for five HHR ICPs from the source data to Paua's system, to determine whether the data is rounded.

Audit commentary

AMS is responsible for HHR data collection, and this is reviewed as part of their audit. The MEP retains raw, unrounded data.

Meter reading data is not rounded or truncated on import.

Audit outcome

Compliant

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

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

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

Audit observation

The HHR estimate process was examined, and a typical sample of 11 estimates were reviewed.

Audit commentary

Where actual data is unavailable by the time of submission, Paua generates estimates. Estimates are used mainly where there is a gap in data, such as a period of communications failure where data cannot be retrieved. If actual data becomes available later, it is loaded into the system, and the estimates are removed through the read reconciliation process described in **section 8.2**.

Paua uses the same data estimation process for correction and estimation. The process for estimation of missing data is set out below:

- once loaded, the files are checked for missing data
- where missing data is detected an estimate is calculated and manually inserted (the estimate is calculated based on the best information available)

- a record of any estimates made is maintained in the same location as the raw data files on the Paua Server, and in hard copy within the Paua Quality folder
- by the 3rd business day of the following month a collation of the daily and HERM (Daily and Half Hour) metering data is transferred to the appropriate MySQL tables (part of the Paua CRM).

I reviewed 11 examples of estimates and found that Paua used reasonable endeavours to ensure that submitted information was within the percentage specified by the Authority in all cases.

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

Review of a registry list for 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with this clause was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

I reviewed the HHR data validation process, including meter event logs, the reconciliation validation and estimate procedure, and system parameters for validations.

Validation of electronic readings was also reviewed as part of the AMS MEP audit.

Audit commentary

Electronic meter reading information is provided by AMS as an MEP, and data validation was reviewed as part of their MEP audit. Meters are interrogated regularly, and there is little risk that data can be overwritten. Data is held for a longer period at the meter and can be re-interrogated later if required.

Paua checks for missing and invalid data.

Zero consumption usually occurs when the meter has been switched off, and is identified through the missing data processes.

Paua checks that consumption is in line with expected patterns at price plan level, as part of their weekly billing validations. Paua intends to build a variance report which will compare each ICP's consumption to the previous week, to better identify potential issues.

Paua receives meter event reports from AMS. These were not historically reviewed, as most issues are identified through Paua's other validations processes. Paua has recently implemented a weekly check of meter event logs, and any issues identified will be actioned. I reviewed two meter event logs and noted all the events related to communications issues, which are also identified through Paua's validation process.

Audit outcome

Compliant

Non-compliance	Description
Audit Ref: 9.6 With: Clause 17 Schedule 15.2 From: March 2016 To: December 2017	Meter event reports were not reviewed prior to January 2018, but are now reviewed and actioned weekly. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as strong, because a weekly review of meter event information is now occurring.</p> <p>The audit risk rating is low, as most events affecting meter accuracy would be detected through Paua's other validation processes.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
None taken.		8/2/2018	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
We now upload and check these weekly.		8/2/2018	

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

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

Code reference

Clause 13.136

Code related audit information

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Paua is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

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

Code reference

Clause 13.137

Code related audit information

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

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

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Paua is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

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

Code reference

Clause 13.138

Code related audit information

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

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

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

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Paua is not responsible for any NSPs. No information is provided to the pricing manager in accordance with this clause.

Audit outcome

Not applicable

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

Code reference

Clause 13.140

Code related audit information

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Paua is not responsible for any NSPs. No information is provided to the pricing manager 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

A registry list was reviewed for the period from 1/04/2017 to 1/01/2018 to confirm the profiles used.

Audit commentary

Paua only uses the HHR profile, which does not require a trading notification.

Audit outcome

Compliant

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

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

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

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

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

Audit observation

The process for the calculation of ICP days was examined by checking all NSPs for November 2017 to confirm the AV110 ICP days calculation was correct.

A registry list with history for the period from 1/04/2017 to 1/01/2018 was reviewed to determine whether there have been any upgrades from NHH to HHR; none were identified.

I reviewed variances for 12 months of GR100 reports.

Audit commentary

The process for the calculation of ICP days was examined by checking all NSPs on the November 2017 ICP days submission. I found that ICP aggregation was correct except for:

- An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 was not processed from the correct date, which resulted in ICP days temporarily being reported against an incorrect NSP. Paua's system has been corrected, and consumption will be submitted against the correct NSP for revisions.
- Inactive ICP days are reported on the AV110. The code defines an ICP day as "any day when an ICP with the installation type L or B is recorded on the registry as having the status of Active".

These differences are recorded as non-compliance below.

The following table shows the ICP days difference between Paua's database and the RM return file (GR100) for all available revisions for 12 months. Negative percentage figures indicate that the Paua's ICP days are higher than those contained on the registry, and positive percentage figures indicate that the Paua's ICP days are lower than those contained on the Registry. The differences appear small and reasonable.

Month	Ri	R1	R3	R7	R14
Dec 2016	0.26%	0.19%	0.61%	0.61%	-
Jan 2017	0.20%	0.17%	0.41%	0.41%	-
Feb 2017	0.07%	0.10%	-0.10%	-0.10%	-
Mar 2017	0.76%	0.43%	0.31%	0.31%	-
Apr 2017	0.17%	-0.09%	-0.09%	-0.09%	-
May 2017	-0.23%	-0.29%	-0.32%	-0.19%	-
Jun 2017	-0.26%	-0.40%	-0.41%	-	-
Jul 2017	-0.32%	-0.37%	-0.39%	-	-
Aug 2017	-0.43%	-0.41%	-0.41%	-	-
Sep 2017	-0.41%	-0.41%	-0.28%	-	-
Oct 2017	-0.49%	-0.52%	-	-	-
Nov 2017	-0.44%	-0.27%	-	-	-

The 2017 audit found some large discrepancies in ICP days for September and October 2016 due to the use of incorrect start dates/incorrect NSPs by Paua. Paua updated start and end dates, and provided revised reports to the Reconciliation Manager. I reviewed the latest GR100 ICP days comparison reports

for these periods and confirmed that the issue had been resolved. Paua also compares ICP days to expected results, and investigates any variances to prevent recurrence of this issue.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 11.2 With: Clause 15.6</p> <p>From: 01-Apr-17 To: 01-Jan-18</p>	<p>One NSP change was not processed from the correct date for ICP 1001147041CK514, which resulted in ICP days temporarily being reported against an incorrect NSP. Paua's records have been updated and revision submissions will be correct.</p> <p>Inactive ICP days are included in the ICP days submission.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The risk rating is moderate as controls are adequate to ensure that submissions are accurate most of the time, but there is room for improvement in relation to submission of inactive ICP days.</p> <p>The impact is low, ICP days were only reported for one inactive ICP in November 2017, and there was no impact on reconciliation. The issue relating to an incorrect NSP change date has now been corrected.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Status change corrected on the Registry.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>This ICP was picked up as having a NSP different from the Registry. The date was incorrect as in our systems it was applied at the start of the following month. We have now changed our system to record the NSP on a daily basis and changed our processes to update billing records to backdate to the date that the change was made.</p> <p>With the changes already made to our systems & processes we consider that the controls in place are strong and are adequate to ensure compliance.</p>		8/2/2018	

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

Code reference

Clause 15.7

Code related audit information

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

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

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

Audit observation

The process for the calculation of as billed volumes was examined, and a sample of ten ICPs were checked for November 2017.

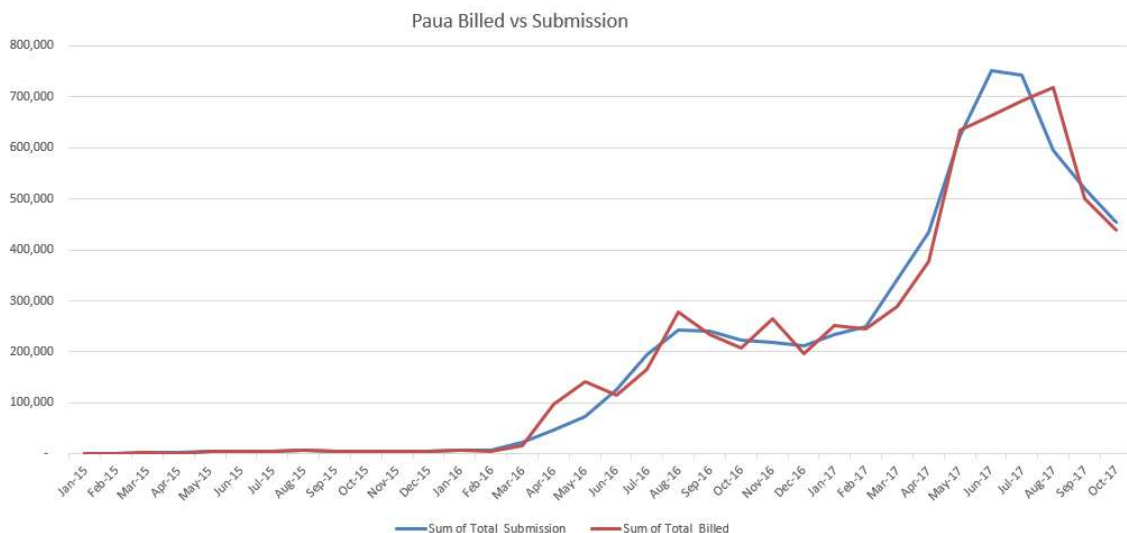
GR130 reports for January 2015 to October 2017 were reviewed to confirm whether the relationship between billed and submitted data appears reasonable.

Audit commentary

The process for the calculation of as billed volumes was examined by matching the AV120 submission for November 2017 to ICP level billed data for all NSPs. The sum of the weekly invoices created in November 2017 were compared to the ICP level billed data for a typical sample of ten ICPs, and found to match.

I also checked the difference between submission and electricity supplied information for a 34 month period, and the results are discussed, and shown in the chart below.

The total difference is -0.33% for the two years ended October 2017 and -1.97% for the year ended October 2017 (billed lower than submission). Paua uses a weekly billing cycle, which means some months have more billing cycles than others. This, combined with customer turnover, has contributed to the differences between billed and submitted data.



The 2017 audit recommended that billed volumes should be compared to submitted volumes and any variances investigated. This recommendation has been implemented, and I saw evidence of the process in operation.

Audit outcome

Compliant

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

Code reference

Clause 15.8

Code related audit information

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

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

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

Audit observation

I confirmed that the process for the calculation and aggregation of HHR data is correct, by matching HHR aggregates information with the HHR volumes data for five submissions.

The GR090 ICP Missing files were examined for December 2016 to November 2017. An extreme case sample of the ten ICPs with the most frequent ICP missing differences were reviewed.

Audit commentary

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

I checked the process for aggregation of HHR data was correct, by matching HHR aggregates information to the volumes for five submissions. Compliance was confirmed, and the non-compliance raised in the 2017 audit in relation to aggregation has been cleared.

The 2017 audit recommended that billed HHR aggregates and volumes should be compared, and any variances investigated. This recommendation has been implemented, and I saw evidence of the process in operation.

Three submission accuracy errors were identified, and are recorded as non-compliance below:

- Injection volumes for 1001153549CKC64 were incorrectly classified as flow direction X for some submissions. Injection volumes will be omitted from future submissions and revisions because the generator has agreed to gift their energy to the market, and the reconciliation manager has been notified.
- An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 was not processed from the correct date, which resulted in volumes and aggregates being temporarily reported against an incorrect NSP. Paua's system has been corrected, and consumption will be submitted against the correct NSP for revisions.

- The GR090 ICP Missing files were examined for all revisions for August 2016 to August 2017. An extreme case sample of the ten ICPs with the most frequent ICP missing differences were reviewed and found:

- ## Audit outcome

Non-compliance	Description
<p>Audit Ref: 11.4</p> <p>With: Clause 15.8</p> <p>From: 01-Apr-17</p> <p>To: 01-Jan-18</p>	<p>HHR aggregates file does not contain electricity supplied information.</p> <p>Some data accuracy issues were identified:</p> <ul style="list-style-type: none"> • injection volumes were temporarily incorrectly classified as flow direction X for ICP 1001153549CKC64 • volumes were temporarily recorded against an incorrect NSP for ICP 1001147041CK514, because an NSP change was processed from an incorrect date • ICPs 0000008330TRDC5, 1001136871UND85 and 1001157086CK7D0 were temporarily excluded from submissions due to incorrect status, or missed volume estimations. <p>Paua's records have been updated, and the affected ICPs will be reported correctly on future submissions and revisions.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating

Low	<p>The issue relating to content of the aggregates file is an error in the code, Paua is providing submission information as expected.</p> <p>The issues relating to temporarily incorrect NSP, injection volumes, and incorrect inactive status were isolated incidents, which have now been corrected. Corrections have been processed for all affected ICPs, and submission information has been, or will be, washed up. Process changes have been implemented to prevent recurrence of these issues.</p> <p>The impact is considered low:</p> <ul style="list-style-type: none">for ICP 1001147041CK514, the new and old NSPs were within the same balancing area and there was no impact on reconciliationfor ICP 1001153549CKC64, the generation volume for November 2017 was 4.9 kWh.		
Actions taken to resolve the issue		Completion date	Remedial action status
Both errors will be corrected in future revisions of the reconciliation reports.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
GIVE have amended our processes to ensure the correct date is applied to changes in NSP.		8/2/2018	
GIVE have developed a process for any further generation ICP (our general policy is not to accept them). We have also made changes to our system to correct the reporting of generation kWh from reconciliation reports.			
With the changes already made to our systems & processes we consider that the controls in place are strong and are adequate to ensure compliance.			

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

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

Audit observation

Data processes for AMS were reviewed as part of their MEP audit.

Daylight savings processes in Paua's system were observed.

Audit commentary

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

The "trading period run on" technique is used for daylight saving adjustment. This was confirmed by checking data recorded for the end of daylight savings in April 2017 and beginning of daylight savings in September 2017. 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

A sample of HHR ICPs were checked to ensure that volumes were correctly recorded in **section 11.4**. Corrections are discussed in **section 8.2**.

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

Audit commentary

No breaches had been recorded for late provision of submission information.

The accuracy of the HHR aggregates and HHR volumes files is discussed in **section 11.4**. Revision files are provided in accordance with this clause.

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**.

I walked through the HHR volumes and aggregates validation process, including reviewing historic validations.

Audit commentary

Paua has validation processes to ensure that aggregation factors and volumes reported are correct. These validation processes are discussed in **sections 2.1**.

An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 was not processed from the correct date, which resulted in volumes and aggregates being temporarily reported against an incorrect NSP. This is recorded as non-compliance below. Paua's system has been corrected, and consumption will be submitted against the correct NSP for revisions.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 12.3</p> <p>With: Clause 15.5</p> <p>From: October to December 2017</p>	<p>Volumes were temporarily recorded against an incorrect NSP for ICP 1001147041CK514, because an NSP change was processed from an incorrect date.</p> <p>Paua's records have been updated, and the affected ICP will be reported correctly on future submissions and revisions.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The issue was an isolated incident, which has now been corrected. Process changes have been implemented to prevent recurrence of this issue.</p> <p>The impact is considered low, the new and old NSPs were within the same balancing area and there was no impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
The error will be corrected in future revisions of the reconciliation reports.		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>GIVE have amended our processes to ensure the correct date is applied to changes in NSP through changes to our systems and to our procedure for updating changes in NSP.</p> <p>With the changes already made to our systems & processes we consider that the controls in place are strong and are adequate to ensure compliance.</p>		8/2/2018	

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

The NSP table on the registry and registry list were reviewed.

Audit commentary

Paua is not responsible for any GIPs; compliance was not assessed.

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

Paua is not a local or embedded network owner; compliance was not assessed.

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

Paua is not a grid connected generator; compliance was not assessed.

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 **section 8.2**.

Audit commentary

Review of alleged breaches confirmed that no reconciliation submissions were made late. Corrections are discussed in **section 8.2**.

Non-compliance is recorded because:

- Injection volumes were temporarily incorrectly classified as flow direction X for 1001153549CKC64.
- Volumes were temporarily recorded against an incorrect NSP for ICP 1001147041CK514, because an NSP change was processed from an incorrect date.
- ICPs 0000008330TRDC5, 1001136871UND85 and 1001157086CK7D0 were temporarily excluded from submissions due to incorrect status, or missed volume estimations.
- The agreed switch reading was not applied for three transfer switches, and two switch moves.
- Inactive ICP days are included in the ICP days submission.

Audit outcome

Non-compliant

<p>GIVE have amended our processes to ensure the correct date is applied to changes in NSP.</p> <p>GIVE have developed a process for any further generation ICP (our general policy is not to accept them). We have also made changes to our system to correct the reporting of generation kWh from reconciliation reports.</p> <p>With the changes already made to our systems & processes we consider that the controls in place are strong and are adequate to ensure compliance.</p>	8/2/2018	
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12.8. Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2)

Code reference

Clause 4 Schedule 15.2

Code related audit information

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

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

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

Audit observation

Processes to make estimated reads permanent were discussed.

Audit commentary

Estimates are only applied where actual readings are not available, or estimate readings have been applied for switching purposes.

Due to the nature of the AMI read process it is highly unlikely reads that have not been able to be retrieved for the previous 14 months, would be retrieved after more than 14 months. Paua could not recall any ICPs where readings became available after revision 14; therefore all estimates were effectively permanent by revision 14.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.3

Code related audit information

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

- *half hour volume information for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a))*
- *for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(b)):*
 - a) *half hour volume information for the ICP; or*
 - b) *non half hour volumes information calculated under clauses 4 to 6 (as applicable).*
 - c) *unmetered load quantities for each ICP that has unmetered load associated with it derived from the quantity recorded in the registry against the relevant ICP and the number of days in the period, the distributed unmetered load database, or other sources of relevant information. (clause 2(1)(c))*
- *to create non half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):*
 - a) *the certification of the control device is recorded in the registry; or*
 - b) *the metering installation in which the control device is location has interim certification.*
- *to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3)):*
 - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
 - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report (clause 2(3)(b)).*

Audit observation

Aggregation and content of reconciliation submissions was reviewed.

Audit commentary

Compliance with this clause was assessed:

- all Paua's ICPs have metering category 1, and are submitted as HHR
- no ICPs with unmetered load are supplied
- no profiles requiring a certified control device are used
- no loss or compensation arrangements are required
- aggregation of the 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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

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

Review of a registry list for the period from 1/04/2017 to 1/01/2018 2018 confirmed that Paua has only supplied any ICPs with HHR profiles.

Audit commentary

No profile changes occurred during the period.

Audit outcome

Not applicable

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

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

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

Audit observation

The process to ensure that submissions are accurate was discussed in **section 12.2**, and aggregation was checked in **section 11.4**.

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

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
- trading period.

The submitted data was also compared to billed data in **section 11.3**, and appeared reasonable.

Non-compliance is recorded because:

- Injection volumes for 1001153549CKC64 were incorrectly classified as flow direction X for some submissions. Injection volumes will be omitted from future submissions and revisions because the generator has agreed to gift their energy to the market, and the reconciliation manager has been notified.
- An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 was not processed from the correct date, which resulted in volumes and aggregates being temporarily reported against an incorrect NSP. Pawa's system has been corrected, and consumption will be submitted against the correct NSP for revisions.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 13.1</p> <p>With: Clause 8 Schedule 15.3</p> <p>From: September 2017</p> <p>To: December 2017</p>	<p>Two ICPs had their data incorrectly aggregated:</p> <ul style="list-style-type: none"> • injection volumes were temporarily incorrectly classified as flow direction X for ICP 1001153549CKC64 • volumes were temporarily recorded against an incorrect NSP for ICP 1001147041CK514. <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		
<p>Low</p>	<p>The issues were isolated incidents, which have now been corrected. Corrections have been processed for the affected ICPs, and submission information has been, or will be, washed up. Process changes have been implemented to prevent recurrence of these issues.</p> <p>The impact is considered low:</p> <ul style="list-style-type: none"> • for ICP 1001147041CK514, the new and old NSPs were within the same balancing area and there was no impact on reconciliation • for ICP 1001153549CKC64, the generation volume for November 2017 was 4.9 kWh. 		
Actions taken to resolve the issue		Completion date	Remedial action status
See comments in 11.4		8/2/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>GIVE have amended our processes to ensure the correct date is applied to changes in NSP.</p> <p>GIVE have developed a process for any further generation ICP (our general policy is not to accept them). We have also made changes to our system to correct the reporting of generation kWh from reconciliation reports.</p> <p>With the changes already made to our systems & processes we consider that the controls in place are strong and are adequate to ensure compliance.</p>		8/2/2018	

13.3. Reporting resolution (Clause 9 Schedule 15.3)

Code reference

Clause 9 Schedule 15.3

Code related audit information

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

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

Audit observation

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

Audit commentary

Review of five AV090 and five AV140 reports confirmed that submission information is appropriately rounded to two decimal places.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

Review of a registry list for the period from 1/04/2017 to 1/01/2018 confirmed that Paua has not supplied any ICPs with submission type NHH.

Audit commentary

Compliance with these clauses was not assessed, because Paua does not deal with NHH readings.

Audit outcome

Not applicable

CONCLUSION

Paua's switching processes are completed manually using the registry. There has been an increase in switching activity; customer numbers have increased dramatically from 43 in March 2016 to 927 in January 2018, and Paua experienced high customer churn in winter 2017. The increased switching workload contributed to the small number of late and incorrectly processed files identified during the audit.

Paua supplies HHR AMI customers only, and relies on AMI reads provided by MEPS. I identified a small number of instances where Paua had applied the midnight AMI read for a switched in ICP, but that reading differed from the agreed switch reading.

Paua has endeavoured to improve their processes during the audit period. All recommendations made in the previous audit have been implemented, and four of the 13 previous non-compliances have been cleared.

This audit identified 15 non-compliances and makes one recommendation. I note that several of the non-compliances relate to minor data discrepancies affecting very small numbers of ICPs, which have now been resolved. Because these discrepancies affected compliance with several clauses, it was necessary to raise non-compliance in several sections of the report for the same issue. For instance:

- An NSP change from HAY0331 to HAY0111 effective 10/10/17 for ICP 1001147041CK514 had not been processed from the correct date. A correction had been processed and correct information will be submitted through the revision process. Non-compliance is recorded in **sections 2.1, 11.2, 11.4, 12.3, 12.7, and 13.1.**
- Injection volumes for 1001153549CKC64 were incorrectly classified as flow direction X for some submissions. Injection volumes will be omitted from future submissions and revisions because the generator has agreed to gift their energy to the market, and the reconciliation manager has been notified. Non-compliance is recorded in **sections 11.4, 12.7, and 13.1.**
- ICP 0000008330TRDC5 was moved to inactive status on 27/04/2017 in error, it should have remained at active status. A backdated correction was processed on 12/01/2018, and the ICP will correctly be included in revision submissions. Non-compliance is recorded in **sections 2.1, 3.9, 11.4, and 12.7.**
- ICPs 1001136871UND85 and 1001157086CK7D0 were missing from the aggregates temporarily because missing consumption was not estimated. This is recorded as non-compliance below. The affected periods occurred before Paua's process change to ensure missing data is always estimated. Data has now been estimated and the ICPs will be correctly included in revision submissions. Non-compliance is recorded in **sections 2.1, 11.4, and 12.7.**

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 22, which results in an indicative audit frequency of 12 months. I have considered this result in conjunction with Paua's responses and recommend that the next audit is completed in 18 months. Paua has demonstrated that process improvements have been made to strengthen controls, and reduce the likelihood of recurrence of non-compliance.

PARTICIPANT RESPONSE

Over the last two years, Paua to the People has invested in significant systems and process improvements to better comply with the code. That we have been largely successful is demonstrated by the very small number of instances raised in the recent Audit. Following the audit, we have addressed all remaining concerns raised. To us, it has been of significant benefit over this period to be able to apply the advice of our Auditor's in the design and application of those systems and processes.

Viewing the results of this audit we are concerned that the magnitude of the compliance issues raised were of a value to the industry of less than 1/1000 of the cost of the auditor (without adding in the time and effort for GIVE in preparing for and supporting the audit process). With the changes already made to our systems & processes we consider that the controls in place are strong and are adequate to ensure compliance.

Looking at the future risk rating system we have a few concerns;

- We note that many of a small number of instances of a breach made multiple breaches of the Code turning them from a rating of 1 to a rating of 4 or more for one error.
- Having a minimum risk rating of 1 (especially given the above point) added significantly to our future risk rating score. We had one instance of using AA for an AMI AW switch which added another point to the total.
- Our understanding is that the future risk rating is to give an indication of the risk of a retailer breaching in the future. However, the rating is based on the performance over the preceding 12 months. GIVE has made significant upgrades to our systems and processes over the last twelve months especially a major upgrade in August 2017. The number of breaches happening after August is almost nil. Shouldn't the Auditors be able to make a recommendation based on what they believe will occur in the future not just on what occurred in the past.

For us the cost of an Audit is a significant expense. We would prefer a longer time between Audits and request that the EA consider this despite a future risk rating score of 22.