

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

For

ForOurGood Limited

Prepared by: Steve Woods

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Date audit report completed: 25 May 2020

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TABLE OF CONTENTS

Executive summary	5
Audit summary	5
Non-compliances	5
Recommendations	6
Issues 6	
1. Administrative	7
1.1. Exemptions from Obligations to Comply with Code (Section 11)	7
1.2. Structure of Organisation	7
1.3. Persons involved in this audit	7
1.4. Use of Agents (Clause 15.34)	7
1.5. Hardware and Software	8
1.6. Breaches or Breach Allegations	8
1.7. ICP Data	9
1.8. Authorisation Received	10
1.9. Scope of Audit	10
1.10. Summary of previous audit	11
2. Operational Infrastructure	12
2.1. Relevant information (Clause 10.6, 11.2, 15.2)	12
2.2. Provision of information (Clause 15.35)	12
2.3. Data transmission (Clause 20 Schedule 15.2)	13
2.4. Audit trails (Clause 21 Schedule 15.2)	13
2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4) ..	14
2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))	15
2.7. Physical location of metering installations (Clause 10.35(1)&(2))	15
2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)	16
2.9. Electrical connection of an ICP (Clause 10.32)	17
2.10. Metering certification (Clause 10.33(2))	17
2.11. Arrangements for line function services (Clause 11.16)	17
2.12. Arrangements for metering equipment provision (Clause 10.36)	18
3. Maintaining registry information	19
3.1. Obtaining ICP identifiers (Clause 11.3)	19
3.2. Providing registry information (Clause 11.7(2))	20
3.3. Changes to registry information (Clause 10 Schedule 11.1)	20
3.4. Trader responsibility for an ICP (Clause 11.18)	22
3.5. Provision of information to the registry (Clause 9 Schedule 11.1)	22
3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)	23
3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)	24
3.8. Management of “active” status (Clause 17 Schedule 11.1)	24
3.9. Management of “inactive” status (Clause 19 Schedule 11.1)	25
3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1)	25
3.11. Change of MEP (Clause 10.22(1)(a)(i))	26
4. Performing customer and embedded generator switching	27
4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3) ..	27

4.2.	Losing trader response to switch request and event dates - standard switch (Clauses 3 and 4 Schedule 11.3)	27
4.3.	Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3).....	29
4.4.	Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3).....	31
4.5.	Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule 11.3)	33
4.6.	Disputes - standard switch (Clause 7 Schedule 11.3).....	33
4.7.	Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3)	34
4.8.	Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)	34
4.9.	Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3 (2))	36
4.10.	Losing trader must provide final information - switch move (Clause 11 Schedule 11.3).....	36
4.11.	Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3)	38
4.12.	Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedule 11.3)	40
4.13.	Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3).....	41
4.14.	Gaining trader to notify registry - gaining trader switch (Clause 16 Schedule 11.3)	41
4.15.	Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3).....	42
4.16.	Metering information (Clause 21 Schedule 11.3)	43
4.17.	Switch saving protection (Clause 11.15AA to 11.15AB).....	43
5.	Maintenance of unmetered load	44
5.1.	Maintaining shared unmetered load (Clause 11.14).....	44
5.2.	Unmetered threshold (Clause 10.14 (2)(b))	45
5.3.	Unmetered threshold exceeded (Clause 10.14 (5))	45
5.4.	Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B).....	46
6.	Gathering raw meter data	47
6.1.	Electricity conveyed & notification by embedded generators (Clause 10.13, Clause 10.24 and 15.13)	47
6.2.	Responsibility for metering at GIP (Clause 10.26 (6), (7) and (8)).....	47
6.3.	Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3).....	48
6.4.	Reporting of defective metering installations (Clause 10.43(2) and (3)).....	48
6.5.	Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2).....	49
6.6.	Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)	50
6.7.	NHH meter reading application (Clause 6 Schedule 15.2)	50
6.8.	Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)	51
6.9.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2).....	51
6.10.	NHH meters 90% read rate (Clause 9(1) and (2) Schedule 15.2)	52
6.11.	NHH meter interrogation log (Clause 10 Schedule 15.2)	52
6.12.	HHR data collection (Clause 11(1) Schedule 15.2)	53
6.13.	HHR interrogation data requirement (Clause 11(2) Schedule 15.2)	53
6.14.	HHR interrogation log requirements (Clause 11(3) Schedule 15.2).....	54
7.	Storing raw meter data	55
7.1.	Trading period duration (Clause 13 Schedule 15.2).....	55
7.2.	Archiving and storage of raw meter data (Clause 18 Schedule 15.2)	55
7.3.	Non metering information collected / archived (Clause 21(5) Schedule 15.2).....	56

8.	Creating and managing (including validating, estimating, storing, correcting and archiving) volume information.....	57
8.1.	Correction of NHH meter readings (Clause 19(1) Schedule 15.2).....	57
8.2.	Correction of HHR metering information (Clause 19(2) Schedule 15.2).....	57
8.3.	Error and loss compensation arrangements (Clause 19(3) Schedule 15.2)	58
8.4.	Correction of HHR and NHH raw meter data (Clause 22(1) and (2) Schedule 15.2)	58
9.	Estimating and validating volume information.....	60
9.1.	Identification of readings (Clause 3(3) Schedule 15.2).....	60
9.2.	Derivation of volume information (Clause 3(4) Schedule 15.2)	60
9.3.	Meter data used to derive volume information (Clause 3(5) Schedule 15.2).....	61
9.4.	Half hour estimates (Clause 15 Schedule 15.2).....	61
9.5.	NHH metering information data validation (Clause 16 Schedule 15.2)	62
9.6.	Electronic meter readings and estimated readings (Clause 17 Schedule 15.2)	62
10.	Provision of metering information to the pricing manager in accordance with subpart 4 of Part 13 (clause 15.38(1)(f))	64
10.1.	Generators to provide HHR metering information (Clause 13.136)	64
10.2.	Unoffered & intermittent generation provision of metering information (Clause 13.137).....	64
10.3.	Loss adjustment of HHR metering information (Clause 13.138).....	65
10.4.	Notification of the provision of HHR metering information (Clause 13.140)	65
11.	Provision of submission information for reconciliation.....	66
11.1.	Buying and selling notifications (Clause 15.3)	66
11.2.	Calculation of ICP days (Clause 15.6)	66
11.3.	Electricity supplied information provision to the reconciliation manager (Clause 15.7)	67
11.4.	HHR aggregates information provision to the reconciliation manager (Clause 15.8)	68
12.	Submission computation	70
12.1.	Daylight saving adjustment (Clause 15.36)	70
12.2.	Creation of submission information (Clause 15.4)	70
12.3.	Allocation of submission information (Clause 15.5)	71
12.4.	Grid owner volumes information (Clause 15.9)	71
12.5.	Provision of NSP submission information (Clause 15.10)	72
12.6.	Grid connected generation (Clause 15.11).....	72
12.7.	Accuracy of submission information (Clause 15.12)	73
12.8.	Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2).....	73
12.9.	Reconciliation participants to prepare information (Clause 2 Schedule 15.3)	74
12.10.	Historical estimates and forward estimates (Clause 3 Schedule 15.3).....	75
12.11.	Historical estimate process (Clause 4 and 5 Schedule 15.3)	75
12.12.	Forward estimate process (Clause 6 Schedule 15.3)	76
12.13.	Compulsory meter reading after profile change (Clause 7 Schedule 15.3).....	76
13.	Submission format and timing	77
13.1.	Provision of submission information to the RM (Clause 8 Schedule 15.3)	77
13.2.	Reporting resolution (Clause 9 Schedule 15.3)	77
13.3.	Historical estimate reporting to RM (Clause 10 Schedule 15.3)	78
	Conclusion	79
	Participant response	79

EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **ForOurGood Ltd (FOGY)**, to support their application for renewal of certification in accordance with clauses 5 and 7 of schedule 15.1. The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits version 7.2.

The audit identified seven non-compliances and two recommendations are made. The non-compliances mainly relate to a small number of errors in the manual registry update and switching processes.

Two recommendations are made. Audit trails can be improved with regard to estimation and correction and I suggest FOGY requires Intellihub Limited to provide replacement data where they have initially provided estimated data.

Strong controls are in place for the collection, validation and submission of HHR data.

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 11, which results in an indicative audit frequency of 18 months.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Changes to registry information	3.3	10 Schedule 11.1	Some late status updates.	Moderate	Low	2	Identified
Losing trader response to switch request and event dates - standard switch	4.2	Clauses 3 and 4 Schedule 11.3	Incorrect response code in 11 AN files.	Strong	Low	1	Identified
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	One CS file where actual reads were recorded as estimates.	Strong	Low	1	Identified
Retailers must use same reading - standard switch	4.4	Clause 6(1) and 6A Schedule 11.3	FOGY as the gaining trader did not use the losing trader's switch event meter reading.	Moderate	Low	2	Identified
Losing trader provides information - switch move	4.8	10 of schedule 11.3	Early event date determined for one ICP. 11 incorrect response codes.	Moderate	Low	2	Identified

Losing trader must provide final information - switch move	4.10	11 of schedule 11.3	Incorrect daily kWh for one ICP.	Moderate	Low	2	Cleared
HHR aggregates	11.4	15.8	Aggregates file contains submission information.	Strong	Low	1	Identified
Future Risk Rating						11	

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	Clause	Description
Relevant information	2.1	15.2	Require Intellihub Limited to provide replacement data for all time periods.
Correction of HHR metering information	8.2	19 of Schedule 15.2	Use the "source" field to display correction reason, technique and which intervals are estimated or corrected.

ISSUES

Subject	Section	Recommendation	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

I checked the Authority's website to identify any relevant exemptions.

Audit commentary

FOGY does not have any exemptions in place.

1.2. Structure of Organisation

FOGY does not yet have a final structure in place. They have been trading for just over one year.

1.3. Persons involved in this audit

Personnel assisting in this audit were:

Name	Title
Tony McGeady	Consultant

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 fulfillment of the participants Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to something the agent has or has not done.*

Audit observation

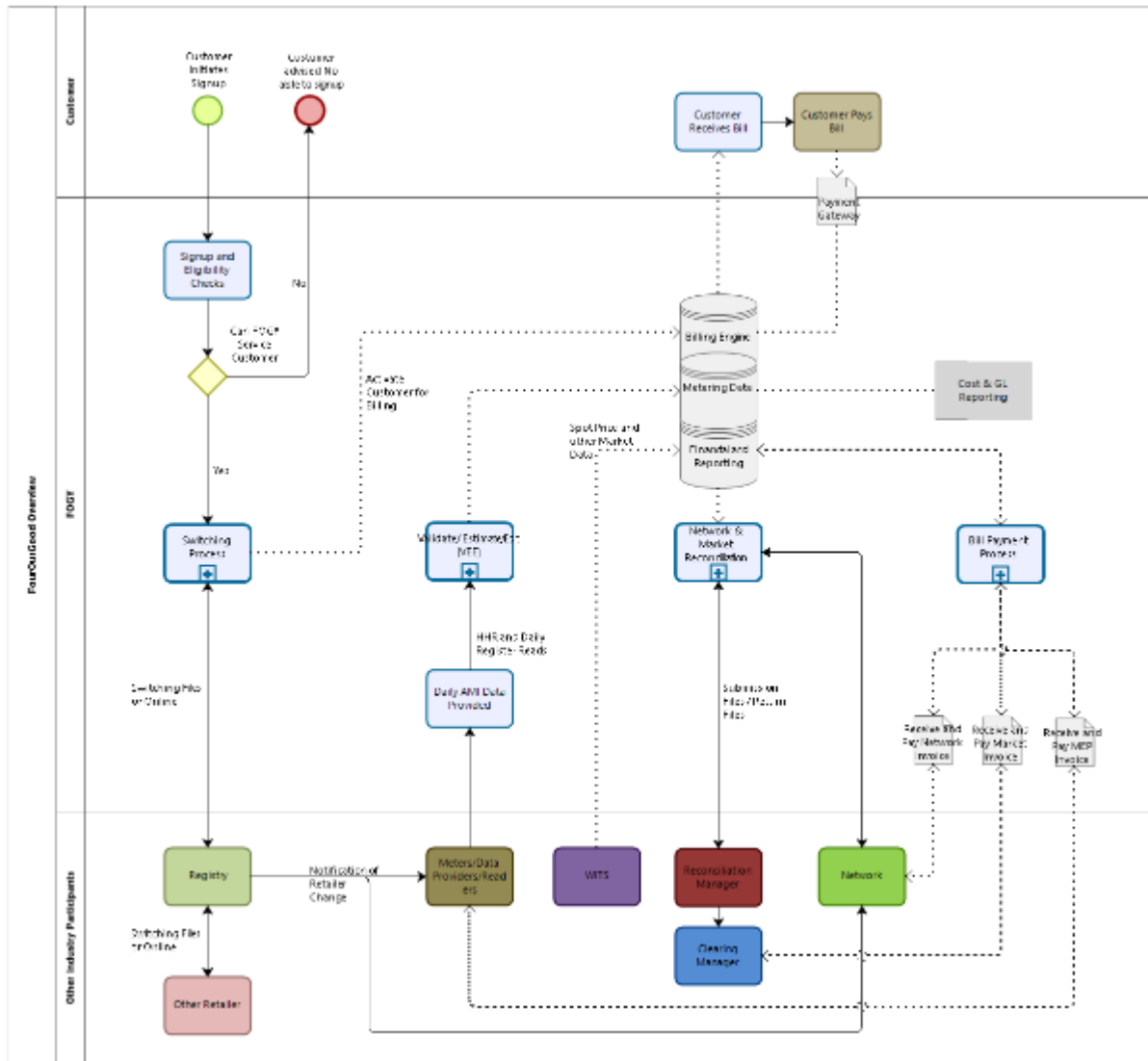
I requested details of agents involved in any relevant processes.

Audit commentary

FOGY uses Intellihub Limited as an agent for supplying estimated HHR data. Intellihub Limited is an MEP providing AMI data but the provision of estimates is undertaken as an agent to retailers not as an MEP.

1.5. Hardware and Software

The diagram below shows the processes and systems at a high level. A bespoke system has been developed and its functionality was checked as part of this audit. The Sequel system is cloud based, hosted by Microsoft and password protection is in place to ensure data security.



1.6. Breaches or Breach Allegations

FOGY has not had any breach allegations recorded by the Electricity Authority during the audit period:

1.7. ICP Data

FOGY provided a list as at May 2020. The quantity of ICPs by status is shown below:

Status	Number of ICPs 2018
Active (2,0)	390
Inactive – new connection in progress (1,12)	0
Inactive – electrically disconnected vacant property (1,4)	1
Inactive – electrically disconnected remotely by AMI meter (1,7)	0
Inactive – electrically disconnected at pole fuse (1,8)	0
Inactive – electrically disconnected due to meter disconnected (1,9)	0
Inactive – electrically disconnected at meter box fuse (1,10)	0
Inactive – electrically disconnected at meter box switch (1,11)	0
Inactive – electrically disconnected ready for decommissioning (1,6)	0
Inactive – reconciled elsewhere (1,5)	0
Decommissioned (3)	0

The active ICPs on the list file were summarised by meter category in the table below.

Metering Category	2018
1	390
2	0
3	0
4	0
5	0
9	0
Blank	0

1.8. Authorisation Received

A letter of authorisation was not required or sought.

1.9. Scope of Audit

FOGY deals with HHR AMI ICPs only. They do not conduct new connections and do not deal with unmetered load. The table below shows the audit scope.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Within Audit Scope
(a) - Maintaining registry information and performing customer and embedded generator switching	✓
(b) – Gathering and storing raw meter data	✓
(c)(i) - Creation and management of HHR volume information	✓
(c)(ii) - Creation and management of NHH volume information	✗
(c)(iii) - Creation and management of HHR & NHH volume information	✗
(c)(iv) - Creation and management of dispatchable load information	✗
(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	✓
(f) - provision of metering information to the grid owner in accordance with subpart 4 of Part 13.	✗

1.10. Summary of previous audit

FOGY provided a copy of the report from the audit conducted in May 2019 by Steve Woods of Veritek Ltd. The results are shown below. Further comment is made in the relevant sections of this report.

Table of non-compliance

Subject	Section	Clause	Non-compliance	Status
HHR aggregates	11.4	15.8	Aggregates file contains submission information.	Still existing

Table of Recommendations

Subject	Section	Clause	Recommendation for Improvement	Status
			Nil	

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 15 is:

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

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

Audit observation

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

Audit commentary

There were no registry errors identified.

Intellihub Limited provides estimated data as an agent to FOGY. The Intellihub Limited audit report records compliance for the estimation technique and audit trail, but records non-compliance for the provision of complete and accurate information, because replacement data is only provided for a 15-day period. If actual data is obtained outside this 15-day window it is not provided. ICP 0000109786UNDED had 12 intervals estimated on 29/01/20 and 24 intervals estimated on 30/01/20. FOGY has requested the actual data for this ICP and if it is available it will be used, or if it's not available the estimated data will become permanent. Whilst compliance is recorded for FOGY because they have taken action as soon as they became aware of the "15-day" issue, I recommend they require Intellihub Limited to supply actual data as soon as it is available even if it's outside the 15-day window.

Recommendation	Description	Audited party comment	Remedial action
Regarding clause 15.2	Require Intellihub Limited to provide replacement data for all time periods.	This has been addressed with the MEP and they will be providing any actual data that replaces Estimates. Plus a process is in place to ensure this occurs	[auditor comment]

Audit outcome

Compliant

2.2. Provision of information (Clause 15.35)

Code reference

Clause 15.35

Code related audit information

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

Audit observation

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

Audit commentary

This area is discussed in several sections in this report and compliance is confirmed with regard to timeliness and format of information in accordance with Part 15.

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

Data transmission is via SFTP.

Audit commentary

Data transmission is via SFTP.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Audit observation

Audit trails were checked, and the results were observed.

Audit commentary

As recorded in **section 8.2**, if an estimate is conducted and actual data is subsequently provided by the MEP, the original row (estimated data) is labelled as “double” and is ignored for billing and submission. A row labelled as “Estimate” may have some or all of the intervals estimated. It can be determined which intervals are estimated because they are different to the row above. Whilst the correction technique and reason is able to be determined, I recommend the “source” field is used to also display this information to make it easier for users to see the audit trail. I also recommend the “source” field is used to display which intervals are estimated. These recommendations are made in **section 8.2**.

Estimated data is supplied by Intellihub Limited; these estimates are identified by use of a Bit Sign which is stored with each interval. “1” means actual data and “-1” means estimated data.

Appropriate audit trails are in place for all other activities.

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

The terms and conditions are compliant with this clause and have a section called “Access to your Property”.

Audit commentary

The terms and conditions are compliant with this clause and have a section called “Access to your Property”.

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

The terms and conditions are compliant with this clause and have a section called "Access to your Property".

Audit commentary

The terms and conditions are compliant with this clause and have a section called "Access to your Property".

Audit outcome

Compliant

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

Code reference

Clause 10.35(1)&(2)

Code related audit information

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

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

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

Audit observation

A discussion was held regarding knowledge of any ICPs with loss compensation present. The presence of loss compensation factors was also checked by examining multipliers for all CT metered ICPs.

Audit commentary

FOGY is not responsible for any metering installations with loss compensation factors.

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

Audit observation

The terms and conditions are compliant with this clause.

Audit commentary

The terms and conditions are compliant with this clause.

Audit outcome

Compliant

2.9. Electrical connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

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

Audit observation

FOGY does not deal with new connections.

Audit commentary

FOGY does not deal with new connections.

Audit outcome

Not applicable

2.10. Metering certification (Clause 10.33(2))

Code reference

Clause 10.33(2)

Code related audit information

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

Audit observation

FOGY does not deal with new connections.

Audit commentary

FOGY does not deal with new connections.

All metering installations have current certification and all reconnected ICPs had certification at the time of reconnection.

Audit outcome

Compliant

2.11. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

Use of System Agreements are in place with all relevant distributors.

Audit commentary

Use of System Agreements are in place with all relevant distributors.

Audit outcome

Compliant

2.12. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

FOGY has agreements in place with all relevant MEPs.

Audit commentary

FOGY has agreements in place with all relevant MEPs.

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

FOGY does not deal with new connections.

Audit commentary

FOGY does not deal with new connections.

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

Audit observation

FOGY currently populates the registry manually. I checked the audit compliance report for the audit period to assess compliance.

Audit commentary

There is a daily registry download to ensure information is accurate in FOGY systems and on a monthly basis a complete validation is conducted. No errors were identified for any ICPs.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 11.1

Code related audit information

If information provided by a trader to the registry about an ICP changes, the trader must notify the registry of the change no later than five business days after the change.

Audit observation

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

In this section I have examined the audit compliance report for the period 01/05/19 to 30/04/20, to identify all late status updates, MEP nominations, and trader updates. To determine the reasons for the late updates, I examined:

- both late updates to “active”, and
- the only late update to “inactive”.

The list file was examined to identify any active ICPs with no MEP recorded, or with meter category nine recorded and the UML flag set to “N”. There were no examples found.

Audit commentary

The table below shows the level of compliance with regard to registry updates. The two late changes to “active” were due to manual processing delays. The procedure has now been changed to ensure the registry step is completed. The late update to “inactive” was due to late notification from the field. There were no trader updates during the audit period.

Event	Year	Total ICPs	ICPs notified within 5 days	ICPs notified greater than 5 days	Average notification days	Percentage compliant
Status updates						
Change to active – Reconnections	2020	3	1	2	23.33	33.3%
Change to inactive	2020	1	0	1	8	0%
Trader updates						
All trader updates excluding new connections and switches in	2020	0	0	N/A	N/A	N/A

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 01-May-19 To: 30-Apr-20	Some late status updates. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Corrected as soon as discovered, Process updated to ensure additional checks are completed with sites switching in that are in-active, and that reconnection notification is provided in a timely manner		20/05/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

Process has been updated, plus a Report has been put in place that identifies any ICP's that have consumption to capture inactive with consumption.	20/05/2020	
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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

I checked the processes in relation to this clause.

Audit commentary

Registry updates are conducted manually, and the MEP field is one of the fields included in validation checks. Final interrogations will occur for decommissioned ICPs because data is provided daily. No ICPs have been decommissioned during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

FOGY populates the registry manually. The audit compliance report for the period 01/05/19 to 30/04/20 was examined to identify any discrepancies.

Audit commentary

There is a daily registry download to ensure information is accurate in FOGY systems and on a monthly basis a complete validation is conducted. Registry data is accurate for all ICPs.

Audit outcome

Compliant

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

FOGY populates the registry manually. The audit compliance report for the period 01/05/19 to 30/04/20 was examined to identify any discrepancies.

Audit commentary

There is a daily registry download to ensure information is accurate in FOGY systems and on a monthly basis a complete validation is conducted. All FOGY ICPs are residential and the registry ANZSIC codes reflect this.

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

FOGY will not deal with unmetered load.

Audit commentary

FOGY will not deal with unmetered load and they have a check in place so that ICPs with unmetered load cannot sign up.

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

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

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

Audit observation

FOGY populates the registry manually. The audit compliance report for the period 01/05/19 to 30/04/20 was examined to identify any discrepancies.

Audit commentary

There is a daily registry download to ensure information is accurate in FOGY systems and on a monthly basis a complete validation is conducted.

All ICPs have metering installed and only have one customer. Submission occurs for all ICPs regardless of status, to ensure all consumption information is captured.

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

FOGY populates the registry manually. The audit compliance report for the period 01/05/19 to 30/04/20 was examined to identify any discrepancies.

Audit commentary

Disconnection and registry population processes are manual, with controls to ensure status are accurate.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Audit observation

FOGY does not deal with new connections.

Audit commentary

FOGY does not deal with new connections. There are no ICPs with a status of “new” or “ready” where FOGY is the proposed trader.

Audit outcome

Compliant

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

Code reference

Clause 10.22(1)(a)(i)

Code related audit information

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

Audit observation

The MEP switch process was discussed.

Audit commentary

FOGY only deals with ICPs with existing AMI metering. No MEP changes have occurred during the audit period. If an MEP change was required it would be conducted manually.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The switch gain process was examined to determine when FOGY deem all conditions to be met. I checked whether there were any backdated switches, indicating the 2-business day threshold may not have been met.

Audit commentary

FOGY'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.

Transfer switch type is applied where a customer is transferring between retailers at an address. This information is collected as part of the customer application process.

There were no backdated NT files sent.

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

- *provide acknowledgement of the switch request by (clause 3(a) of Schedule 11.3):*

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

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

Audit observation

An event detail report for 01/05/19 to 30/04/20 was reviewed to identify AN files issued by FOGY during the audit period, and:

- a sample of two ANs per response code were reviewed to determine whether the codes had been correctly applied, and
- assess compliance with the requirement to meet the setting of event dates requirement.

The switch breach report was examined for the audit period.

Audit commentary

Most AN files had the correct code of “AD”, but there were 11 AN files where AMI metering was present and the “AA” code was used. The process has now changed to ensure the correct codes are used. The “OC” code was correctly used.

The event detail report was reviewed for all 23 transfer ANs to assess compliance with the setting of event dates requirements. They all had proposed event dates within five business days of the NT arrival date.

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

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: Clauses 3 and 4 Schedule 11.3 From: 24-Oct-19 To: 28-Mar-20	Incorrect response code in 11 AN files. Potential impact: Low Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	The controls are recorded as strong because they have recently been improved to ensure correct codes are used. There is no impact on other parties because this field in the AN file is seldom used. The registry data is more relevant and is used by most traders. The audit risk rating is recorded as low.
Actions taken to resolve the issue	
Completion date	Remedial action status

Additional Training given and process documentation for manual AN files has been updated to ensure rules for Response codes is clear	21/05/2020	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
AN files automated where possible, plus improved process for manual AN's when these are required	21/05/2020	

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

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

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

Audit observation

An event detail report for 01/05/19 to 30/04/20 was reviewed to identify CS files issued by FOGY during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of five files. The content checked included:

- correct identification of meter readings and correct date of last meter reading,
- accuracy of meter readings, and
- accuracy of average daily consumption.

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

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

Audit commentary

CS timeliness

CS file timeliness is managed using the switch breach report.

The switch breach history report did not contain any late transfer CS files.

CS content

The Registry Functional Specification v22.21 states that average daily consumption within the CS file should be the average kWh per day for the last read period.

FOGY's estimated daily kWh is calculated between the last two actual readings. Analysis estimated daily kWh in the event detail report did not identify any questionable estimated daily kWh figures.

Count of transfer CS files	Estimated daily kWh
Negative	-
Zero	-
More than 200 kWh	-

The CS file content was checked for accuracy and I found that ICP 0000504750NRCOB had actual reads recorded as estimates. All other content was correct.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.3 With: Clause 5 Schedule 11.3 From: 17-Mar-20 To: 17-Mar-20	One CS file where actual reads were recorded as estimates. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because CS content is now automated. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Reads were Actual, only flagged as Estimated, Process updated for Manual CS (on Registry) to ensure additional checks are performed prior to committing CS, including the read type and utilizing the same calculation method for average consumption as the system uses (Read to Read)		20/05/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
System generated CS files is the primary form of CS file, only Manual in complicated switches. Process Changes ensures additional checks to ensure correct read type, average is calculated as per system rules and other values are correct before committing		21/05/2020	

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 change requests was examined.

The event detail report for 01/05/19 to 30/04/20 was analysed to identify all read change requests and acknowledgements during the audit period. Four RR files issued by FOGY were checked, and three AC files sent by other traders where they had rejected the FOGY RR were checked. FOGY did not reject any RR files.

I also checked a sample of five estimated CS files provided by other traders where no RR was issued to determine whether the correct readings were recorded.

The switch breach report was reviewed to identify late RR and AC files.

Audit commentary

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

FOGY issued 34 RR files for transfer switches. None were received from other traders.

A review of five transfer CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in FOGY's systems.

Three RR files sent by FOGY were rejected. A withdrawal was sent for one ICP, another switched back to the original trader but for ICP 1002062581LC8DD, the reading provided was an estimate of 2420, but FOGY had an actual AMI reading of 1085. FOGY sent an RR which was rejected. The RR was not sent within five business days; FOGY was therefore required to use the incorrect estimate of 2420 or begin the dispute process.

The switch breach report recorded no late RR or AC files for transfer switches.

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: 02-Oct-19</p> <p>To: 18-May-20</p>	<p>FOGY as the gaining trader did not use the losing trader's switch event meter reading.</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>The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement.</p> <p>The impact on settlement and participants is minor; therefore, the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>As a HHR retailer FOGY goes to considerable effort to ensure the correct read is used for the switch, therefore requiring a larger number of RR's than would be expected for a non HHR retailer.</p> <p>FOGY Continue to dispute any reads that are rejected by losing traders</p> <p>RR's normally occur within a day or two (as soon as first HHR read arrives), this can be longer in cases of poor comms on meter that delays the delivery of data)</p>		21/05/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Working with MEP to endeavour to get a read within the 5 days and put follow-up processes in place if not received in time.</p> <p>Delayed Read delivery (poor comms with AMI meter) will mean that late reads will continue, and FOGY will continue to dispute any rejections that are legitimate</p>		30/06/2020	

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

The process for the management of read change requests was examined.

The event detail report for 01/05/19 to 30/04/20 was analysed to identify all read change requests and acknowledgements during the audit period. Four RR files issued by FOGY were checked and three AC files sent by other traders where they had rejected the FOGY RR were checked. FOGY did not reject any RR files.

Audit commentary

These RR requests are processed in the same way as those received for greater than 200 kWh. Each request is evaluated and validated against the ICP information. If the request is within validation requirements these are accepted.

FOGY is a HHR only trader, therefore as a losing trader this clause does not apply.

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 11.3

Code related audit information

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

Audit observation

The switching process documentation was examined.

Audit commentary

There have not been any disputes, but as mentioned in **section 4.4**, a dispute should have been raised for one ICP.

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.3

Code related audit information

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

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

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

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

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

Audit observation

The switch gain process was examined to determine when FOGY deem all conditions to be met. I checked whether there were any backdated switches, indicating the 2-business day threshold may not have been met.

Audit commentary

FOGY'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.

Switch move is applied where a new customer is moving into an address. This information is collected as part of the customer application process.

13 backdated NT files were sent. In all cases the NT was sent within two business days of all conditions being met.

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

10(1) Within five business days after receipt of notification of the switch move from the registry, if the losing trader accepts the event date proposed by the gaining trader, the losing trader must complete the switch by providing to the registry:

- *confirmation of the switch event date; and*

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

Audit observation

An event detail report for 01/05/19 to 30/04/20 was reviewed to identify AN files issued by FOGY during the audit period, and:

- a sample of two ANs per response code were reviewed to determine whether the codes had been correctly applied, and
- assess compliance with the requirement to meet the setting of event dates requirement.

The switch breach report was examined for the audit period.

Audit commentary

Most AN files had the correct code of “AD”, but there were 11 AN files where AMI metering was present and the “AA” code was used. The process has now changed to ensure the correct codes are used. The “OC” code was correctly used.

The event detail report was reviewed for all 21 transfer ANs to assess compliance with the setting of event dates requirements. They all had proposed event dates within five business days of the NT arrival date but three had event dates earlier than the gaining trader’s proposed event dates. Two ICPs switched on the gaining trader’s proposed date, but ICP 0121424545LC150 switched on 24/02/20 despite the gaining trader indicating they wanted to switch on 04/03/20.

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

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.8 With: 10(1) Schedule 11.3 From: 24-Feb-20 To: 04-Mar-20	Early event date determined for one ICP. 11 incorrect response codes Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
Additional Training given and process documentation for manual AN files has been updated to ensure rules for Response codes is clear. Agreement of different dates than original Request has also resulted in a change in process to Withdraw and request for corrected agreed date	30/05/2020	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
AN files automated where possible, plus improved process for manual AN's when these are required, date issues will now be resolved with NW and re-requests for corrected agreed date	30/05/2020	

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

Code reference

Clause 10(2) Schedule 11.3 (2)

Code related audit information

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

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

Audit observation

An event detail report for 01/05/19 to 30/04/20 was reviewed to identify AN files issued by FOGY during the audit period.

Audit commentary

Three ICPs had different dates set. Final information was provided in accordance with this clause.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 11.3

Code related audit information

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

- *provide the event date (clause 11(a)); and*

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

Audit observation

An event detail report for 01/05/19 to 30/04/20 was reviewed to identify CS files issued by FOGY during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of five files. The content checked included:

- correct identification of meter readings and correct date of last meter reading,
- accuracy of meter readings, and
- accuracy of average daily consumption.

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

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

Audit commentary

CS timeliness

CS file timeliness is managed using the switch breach report.

The switch breach history report did not contain any late transfer CS files.

CS content

The Registry Functional Specification v22.21 states that average daily consumption within the CS file should be the average kWh per day for the last read period.

FOGY's estimated daily kWh is calculated between the last two actual readings. Analysis estimated daily kWh in the event detail report did not identify any questionable estimated daily kWh figures.

Count of transfer CS files	Estimated daily kWh
Negative	-
Zero	-
More than 200 kWh	-

The CS file content was checked for accuracy and I found that ICP 0000128204UN54A had an average daily kWh in the CS file of 32, but the actual daily consumption was much lower than 32. All other content was correct.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.10 With: Clause 11 Schedule 11.3 From: 24-Jan-20 To: 24-Jan-20	Incorrect daily kWh for one ICP. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Was result of a Manual CS file - Process updated for Manual CS (on Registry) to ensure additional checks are performed prior to committing CS, including the read type and utilizing the same calculation method for average consumption as the system uses (Read to Read)		20/05/2020	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Process updated for Manual CS (on Registry) to ensure additional checks are performed prior to committing CS, including the read type and utilizing the same calculation method for average consumption as the system uses (Read to Read)		20/05/2020	

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

Code reference

Clause 12 Schedule 11.3

Code related audit information

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

- *if the switch meter reading established by the gaining trader differs by less than 200 kWh from that provided by the losing trader, both traders must use the switch event meter reading provided by the gaining trader (clause 12(2)(a)); or*
- *if the switch event meter reading provided by the losing trader differs by 200 kWh or more from a value established by the gaining trader, the gaining trader may dispute the switch meter*

reading. In this case, the gaining trader, within 4 calendar months of the actual event date, must provide to the losing trader a changed validated meter reading or a permanent estimate supported by 2 validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):

- *notify the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or*
- *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader (clause 12(3)(b)).*

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

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

Audit observation

The process for the management of read change requests was examined.

The event detail report for 01/05/19 to 30/04/20 was analysed to identify all read change requests and acknowledgements during the audit period. Four RR files issued by FOGY were checked, and one AC file sent by other traders where they had rejected the FOGY RR were checked. FOGY did not reject any RR files.

I also checked a sample of five estimated CS files provided by other traders where no RR was issued to determine whether the correct readings were recorded.

The switch breach report was reviewed to identify late RR and AC files.

Audit commentary

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

FOGY issued five RR files for move switches. One was received from another trader.

A review of five CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in FOGY's systems.

One RR file sent by FOGY was rejected. ICP 0000538890NRE47 had a CS sent on 15/04/20 and FOGY sent an RR on 16/04/20, which is within five business days so the losing trader must use this reading, but they rejected the RR. FOGY correctly used the reading they supplied in the RR file.

The switch breach report recorded no late RR or AC files for transfer switches.

Audit outcome

Compliant

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

Code reference

Clause 14 Schedule 11.3

Code related audit information

The gaining trader switch process applies where a trader and a customer or embedded generator enters into an arrangement in which the trader commences trading electricity with the customer or embedded generator to trade electricity through or assume responsibility for:

- *a half hour metering installation that is not a category 1 or 2 metering installation, that has an ICP with a submission type half hour on the registry and an AMI flag of “N”; or*
- *a half hour metering installation that has a submission flag of half hour and an AMI flag of “N” and is traded by the losing trader as non-half hour; or*
- *a non-half hour metering installation at an ICP with the losing trader trades through a half hour metering installation with an AMI flag of “N”.*

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

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

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

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

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

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

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

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

Audit observation

FOGY does not deal with any HH switches.

Audit commentary

FOGY does not deal with any HH switches.

Audit outcome

Not applicable

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

Code reference

Clause 15 Schedule 11.3

Code related audit information

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

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

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

Audit observation

FOGY does not deal with any HH switches.

Audit commentary

FOGY does not deal with any HH switches.

Audit outcome

Not applicable

4.14. Gaining trader to notify registry - gaining trader switch (Clause 16 Schedule 11.3)

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

FOGY does not deal with any HH switches.

Audit commentary

FOGY does not deal with any HH switches.

Audit outcome

Not applicable

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

Code reference

Clauses 17 and 18 Schedule 11.3

Code related audit information

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

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

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

Audit observation

An event detail report for 01/05/19 to 30/04/20 was reviewed to:

- identify all switch withdrawal requests issued by FOGY, and the content of a sample of at least two ICPs from the event detail report for each withdrawal code were checked using the typical sampling methodology, including five withdrawal requests rejected by other traders,
- identify all switch withdrawal acknowledgements issued by FOGY - a sample of three rejections were checked, and
- confirm timeliness of switch requests, as this is not currently being identified in the switch breach report.

The switch breach reports were checked for any late switch withdrawal requests or acknowledgements.

Audit commentary

Analysis of the switch withdrawal codes for 17 ICPs confirmed all were correctly coded.

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

Five (7%) of the 71 AWs issued by FOGY were rejections. I reviewed all five rejections by FOGY, and confirmed they were rejected based the information available at the time the response was issued.

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

Audit outcome

Compliant

4.16. Metering information (Clause 21 Schedule 11.3)

Code reference

Clause 21 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The meter reading process in relation to meter reads for switching purposes was examined.

Audit commentary

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

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 losing retailer must not, by any means, including by using a third party or agent acting on its behalf, contact any customer who is switching from the losing retailer to a gaining retailer to attempt to persuade the customer to terminate the arrangement with the gaining retailer during the switch protected period, including by –

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

(b) offering an enticement to the customer

Audit observation

FOGY does not directly contact customers.

Audit commentary

FOGY does not directly contact customers.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

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

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

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

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

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

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

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

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

Audit observation

FOGY does not deal with unmetered load.

Audit commentary

FOGY does not deal with unmetered load.

Audit outcome

Not applicable

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

FOGY does not deal with unmetered load.

Audit commentary

FOGY does not deal with unmetered load.

Audit outcome

Not applicable

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

FOGY does not deal with unmetered load.

Audit commentary

FOGY does not deal with unmetered load.

Audit outcome

Not applicable

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

Code reference

Clause 11 Schedule 15.3, Clause 15.37B

Code related audit information

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

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

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

Audit observation

FOGY does not deal with unmetered load.

Audit commentary

FOGY does not deal with unmetered load.

Audit outcome

Not applicable

6. GATHERING RAW METER DATA

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

Code reference

Clause 10.13, Clause 10.24 and 15.13

Code related audit information

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

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

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

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

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

Audit observation

A registry list was examined to confirm whether FOGY supplies any ICPs with generation.

Audit commentary

Five ICPs have generation. The appropriate metering is installed, and the import and export kWh are quantified.

No ICPs had bridged meters during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

The participant responsible for the metering installation must:

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

Audit observation

FOGY does not have responsibility for any GIPs.

Audit commentary

FOGY does not have responsibility for any GIPs.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

FOGY does not use any profiles requiring control devices.

Audit commentary

FOGY does not use any profiles requiring control devices.

Audit outcome

Not applicable

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

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

Audit observation

I checked the controls in place to identify defective metering, and I checked the only two examples.

Audit commentary

FOGY has the following checks in place to identify potentially defective metering.

- Sum-check validation between the sum of the intervals and the difference between midnight reads. The threshold is 0.01 kWh.
- An alert for any “null” values, indicating missing data.
- Check for 48 intervals and that a midnight read is present.

Two examples were checked, and appropriate notification occurred to the MEP.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

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

2(6) – The interrogation systems must record:

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

Audit observation

FOGY does not collect data; this is provided by the MEP.

Audit commentary

FOGY does not collect data; this is provided by the MEP.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

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

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

Audit observation

FOGY does not collect data; this is provided by the MEP.

Audit commentary

FOGY does not collect data; this is provided by the MEP.

Audit outcome

Not applicable

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

FOGY only deals with HHR data.

Audit commentary

FOGY only deals with HHR data.

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

FOGY only deals with HHR data.

Audit commentary

FOGY only deals with HHR data.

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

FOGY only deals with HHR data.

Audit commentary

FOGY only deals with HHR data.

Audit outcome

Not applicable

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

Code reference

Clause 9(1) and (2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

FOGY only deals with HHR data.

Audit commentary

FOGY only deals with HHR data.

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

FOGY only deals with HHR data.

Audit commentary

FOGY only deals with HHR data.

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 the MEP and is obtained from the services access interface.

Audit commentary

HHR data is provided by the MEP and is obtained from the services access interface.

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

FOGY does not collect data; this is provided by the MEP.

Audit commentary

FOGY does not collect data; this is provided by the MEP.

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

FOGY does not collect data; this is provided by the MEP.

Audit commentary

FOGY does not collect data; this is provided by the MEP.

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

FOGY does not collect data; this is provided by the MEP.

Audit commentary

FOGY does not collect data; this is provided by the MEP.

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

FOGY does not collect data; this is provided by the MEP.

Audit commentary

FOGY does not collect data; this is provided by the MEP.

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

FOGY does not deal with any non-metering information.

Audit commentary

FOGY does not deal with any non-metering information.

Audit outcome

Not applicable

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

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

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

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

- 19(1)(a) - *confirmation of the original meter reading by carrying out another meter reading*
- 19(1)(b) - *replacement of the original meter reading by another meter reading (even if the replacement meter reading may be at a different date)*
- 19(1)(c) - *if the original meter reading cannot be confirmed or replaced by a meter reading from another interrogation, then an estimated reading is substituted, and the estimated reading is marked as an estimate and it is subsequently replaced in accordance with clause 4(2).*

Audit observation

FOGY will not deal with any NHH metering information.

Audit commentary

FOGY will not deal with any NHH metering information.

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

I checked the process for estimation and correction. The process is the same whether it is an estimation or a correction.

Audit commentary

There are two estimation methodologies. If a midnight read is available on either side of the period to be estimated, the system will automatically calculate and apportion the correct kWh figure between reads evenly across the relevant intervals. If register reads are not available, estimation is conducted manually based on similar historic consumption.

If an estimate is conducted and actual data is subsequently provided by the MEP, the original row (estimated data) is labelled as “double” and is ignored for billing and submission. A row labelled as “Estimate” may have some or all of the intervals estimated. It can be determined which intervals are estimated because they are different to the row above. Whilst the correction technique and reason is able to be determined, I recommend the “source” field is used to also display this information to make it easier for users to see the audit trail. I also recommend the “source” field is used to display which intervals are estimated.

Recommendation	Description	Audited party comment	Remedial action
Clause 19 of Schedule 15.2	Use the “source” field to display correction reason, technique and which intervals are estimated or corrected.	FOGY agree with this recommendation and will include the suggested information in the “source” field on the FOGY platform	Identified

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

FOGY does not have ICPs with error or loss compensation arrangements.

Audit commentary

FOGY does not have ICPs with error or loss compensation arrangements.

Audit outcome

Not applicable

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

Code reference

Clause 22(1) and (2) Schedule 15.2

Code related audit information

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

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

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

- 22(2)(c) - *the operator identifier of the reconciliation participant*
- 22(2)(d) - *the half-hour metering data or the non-half hour metering data corrected or altered, and the total difference in volume of such corrected or altered data*
- 22(2)(e) - *the technique used to arrive at the corrected data*
- 22(2)(f) - *the reason for the correction or alteration.*

Audit observation

I checked the processes for estimation and correction.

Audit commentary

Raw data is not edited during the estimation and correction processes.

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

FOGY does not deal with any NHH data. I checked HHR estimates.

Audit commentary

As mentioned in **section 8.2**, estimated data is identified, but I've made a recommendation to ensure better clarity regarding which intervals are estimated and which are not.

Audit outcome

Not applicable

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

FOGY will not deal with any NHH data. HHR data is used and is estimated or corrected if necessary.

Audit commentary

FOGY will not deal with any NHH data. HHR data is used and is estimated or corrected if necessary.

Audit outcome

Compliant

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

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

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

Audit observation

I checked all submission files since the start of trading to confirm that data is not rounded or truncated.

Audit commentary

Data is not rounded or truncated until the submission files are produced and then rounding occurs to two decimal places.

Audit outcome

Compliant

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

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

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

Audit observation

I checked the process for estimation and correction. The process is the same whether it is an estimation or a correction.

Audit commentary

There are two estimation methodologies. If a midnight read is available on either side of the period to be estimated, the system will automatically calculate and apportion the correct kWh figure between reads evenly across the relevant intervals. If register reads are not available, estimation is conducted manually based on similar historic consumption.

If an estimate is conducted and actual data is subsequently provided by the MEP, the original row (estimated data) is labelled as "duplicate" and is ignored for billing and submission.

As mentioned in **section 8.2**, I have recommended the "source" field is used to display which intervals are estimated.

Intellihub Limited provides estimated data as an agent to FOGY. The Intellihub Limited audit report records compliance for the estimation technique and audit trail, but records non-compliance for the provision of complete and accurate information, because replacement data is only provided for a 15-day period. If actual data is obtained outside this 15-day window it is not provided. ICP 0000109786UNDED had 12 intervals estimated on 29/01/20 and 24 intervals estimated on 30/01/20. FOGY has requested the

actual data for this ICP and if it's available it will be used, or if it's not available the estimated data will become permanent.

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

FOGY does not deal with any NHH data.

Audit commentary

FOGY does not deal with any NHH data.

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 zero values

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

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

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

Audit observation

I checked the validation processes to confirm compliance.

Audit commentary

Checks are in place as follows:

- missing data is identified in the database because any record with a “null” fails validation,
- if data is provided for a previous date, one of the rows will be marked as a “duplicate” and will not be used (I checked an example which confirmed compliance),
- zero values are expected, and the sum-check validation will ensure only expected zeros are “passed”,
- FOGY intends to report on high consumption and negative consumption to ensure data is within expected flow patterns - this check is currently manual,
- a sum-check validation occurs to identify differences between register reads and interval data, and
- all relevant events are monitored to identify issues.

Audit outcome

Compliant

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

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

Code reference

Clause 13.136

Code related audit information

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

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

Audit observation

FOGY does not have responsibilities for the provision of information to the grid owner.

Audit commentary

FOGY does not have responsibilities for the provision of information to the grid owner.

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

FOGY does not have responsibilities for the provision of information to the grid owner.

Audit commentary

FOGY does not have responsibilities for the provision of information to the grid owner.

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

FOGY does not have responsibilities for the provision of information to the grid owner.

Audit commentary

FOGY does not have responsibilities for the provision of information to the grid owner.

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

FOGY does not have responsibilities for the provision of information to the grid owner.

Audit commentary

FOGY does not have responsibilities for the provision of information to the grid owner.

Audit outcome

Not applicable

11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

11.1. Buying and selling notifications (Clause 15.3)

Code reference

Clause 15.3

Code related audit information

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

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

Audit observation

FOGY only uses the HHR profile.

Audit commentary

FOGY only uses the HHR profile.

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 checked.

Audit commentary

The ICP days for ALB0331, HEN0331 and PAK0331 for November 2019 were checked against registry and submission information and they were confirmed as correct.

I reviewed FOGY's validation controls, which are a separate report to compare the ICP days in the file with the ICP days in database.

ICPCOMP and ICPMISS files are reviewed to ensure discrepancies are identified and resolved. All differences for the audit period were due to backdated registry events.

Audit outcome

Compliant

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

Code reference

Clause 15.7

Code related audit information

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

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

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

Audit observation

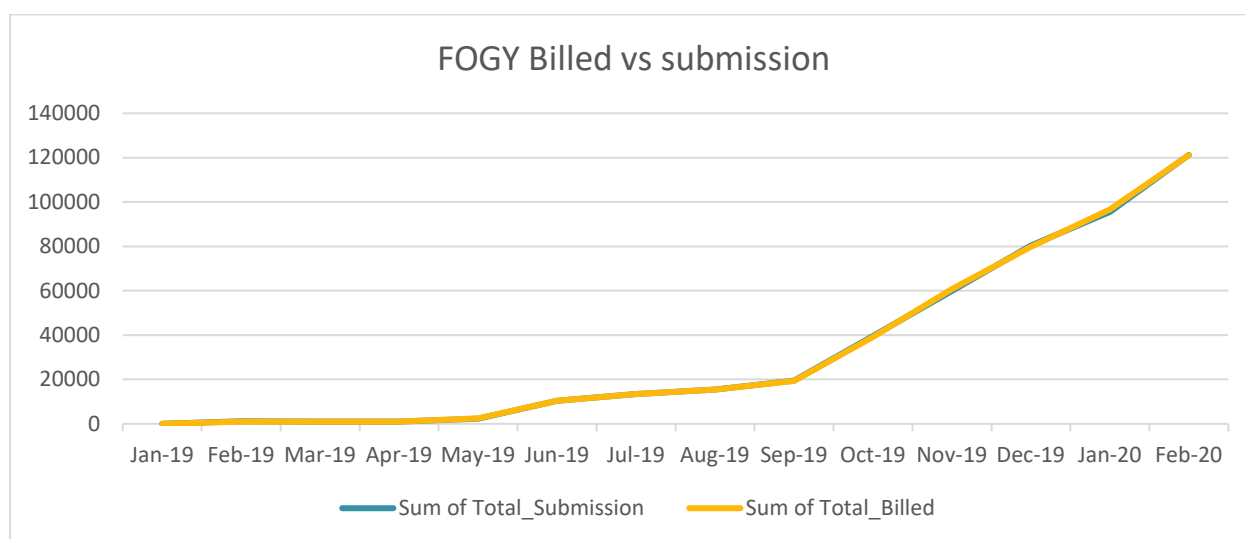
The accuracy of electricity supplied files was tested by checking file formats, that the correct aggregation was occurring, and that the data was applied to the correct month.

Audit commentary

The file is calculating correctly, and the format is correct.

HHR data is in two tables, one for submission and another for billing. Invoicing occurs daily therefore the electricity supplied totals match the submission totals. Payment is at different intervals but there is an invoice record for each day, and this was demonstrated.

The total difference between electricity supplied and submission data is 0.08% for the audit period. The graph shows the trend.



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

The process for the preparation of the HHR aggregates file was tested and the results compared to raw data and to the HHR vols file.

Audit commentary

FOGY's system is designed to prepare the HHR Aggregates file at ICP level based on submission information.

Clause 15.8 states that the aggregates file should contain electricity supplied information rather than submission information and electricity supplied information is defined as shown below:

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

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

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

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

Whilst the Code clearly states this file should be derived from financial records, I recommend FOGY liaises with the Authority regarding a Code change which will allow for the aggregates files used in the industry to remain unchanged.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.4 With: Clause 15.8 of part 15 From: 28-Jan-19 To: 18-May-20	Aggregates file contains submission information. Potential impact: None Actual impact: None Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	FOGY is reporting submission volumes at ICP level as expected by the reconciliation manager.		
Actions taken to resolve the issue		Completion date	Remedial action status
FOGY continues to provide the data in the way the RM requires, and will work with the EA to resolve this Rule Conflict		30/09/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
FOGY continues to provide the data in the way the RM requires, and will work with the EA to resolve this Rule Conflict		30/09/2020	

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

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

Audit observation

Daylight saving adjustment was checked during the audit.

Audit commentary

Daylight saving adjustment occurs in a compliant manner.

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

This clause relates to the timing of sending of files. I checked for any late files.

Audit commentary

There were no late files.

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 by the registry for the relevant consumption period at the time the reconciliation participant assembles the submission information. Volume information must be derived in accordance with Schedule 15.2.

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

Audit observation

The aggregation process for the AV090 file was tested and confirmed as accurate.

Audit commentary

The registry list file is compared to FOGY's data at the start of the submission cycle to ensure accuracy.

Audit outcome

Compliant

12.4. Grid owner volumes information (Clause 15.9)

Code reference

Clause 15.9

Code related audit information

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

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

Audit observation

FOGY is not a grid owner.

Audit commentary

FOGY is not a grid owner.

Audit outcome

Not applicable

12.5. Provision of NSP submission information (Clause 15.10)

Code reference

Clause 15.10

Code related audit information

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

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

Audit observation

FOGY is not an embedded network owner.

Audit commentary

FOGY is not an embedded network owner.

Audit outcome

Not applicable

12.6. Grid connected generation (Clause 15.11)

Code reference

Clause 15.11

Code related audit information

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

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

Audit observation

FOGY does not have any grid connected generation.

Audit commentary

FOGY does not have any grid connected generation.

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

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

Audit observation

The revision process was checked during the audit to confirm compliance.

Audit commentary

All estimates are replaced with actual data where it is available. Revision files are provided whether data has changed or not.

Audit outcome

Compliant

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

Code reference

Clause 4 Schedule 15.2

Code related audit information

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

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

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

Audit observation

FOGY does not deal with NHH data. The presence of HHR estimates at R14 will be checked during subsequent audits.

Audit commentary

FOGY does not deal with NHH data. The presence of HHR estimates at R14 will be checked during subsequent audits. The table below shows all ICPs where estimated data has not been replaced with actual data in three and seven month revisions. No estimated data is present in 14-month revisions.

ICP	Date	Estimated Intervals	MEP
0000250372WA7FD	16-Jan-20	4	NGCM
0000109786UNDED	29-Jan-20	12	MTRX
0000109786UNDED	30-Jan-20	24	MTRX
0000161322WA3CD	31-Dec-19	6	NGCM
0000518914NRACE	20-Feb-20	32	NGCM
0000518914NRACE	21-Feb-20	4	NGCM

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.3

Code related audit information

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

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

Audit observation

FOGY only deals with HHR data.

Submission processes were checked by comparing raw data to the aggregates file and to the HHR vols file and ICP days.

I checked the ICPMISS reporting for the audit period to ensure all ICPs had volume submitted.

Audit commentary

Volumes and aggregates files matched and the ICPMISS files only contained examples where backdated registry events had occurred.

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

FOGY does not deal with NHH data.

Audit commentary

FOGY does not deal with NHH data.

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 kWhPx must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by kWhPx.

Audit observation

FOGY does not deal with NHH data.

Audit commentary

FOGY does not deal with NHH data.

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

FOGY does not deal with NHH data.

Audit commentary

FOGY does not deal with NHH data.

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

FOGY will only use the HHR profile.

Audit commentary

FOGY will only use the HHR profile.

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

I checked processes to ensure the correct aggregation of submission information.

Audit commentary

FOGY downloads a list file and compares it to their data at the start of each submission cycle to ensure accuracy. There were no examples of incorrect aggregation identified.

Audit outcome

Compliant

13.2. Reporting resolution (Clause 9 Schedule 15.3)

Code reference

Clause 9 Schedule 15.3

Code related audit information

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

Aggregation of the submission files was checked.

Audit commentary

Data is rounded to two decimal places.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

FOGY does not deal with any NHH data.

Audit commentary

FOGY does not deal with any NHH data.

Audit outcome

Not applicable

CONCLUSION

The audit identified seven non-compliances and two recommendations are made. The non-compliances mainly relate to a small number of errors in the manual registry update and switching processes.

Two recommendations are made. Audit trails can be improved with regard to estimation and correction and I suggest FOGY requires Intellihub Limited to provide replacement data where they have initially provided estimated data.

Strong controls are in place for the collection, validation and submission of HHR data.

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 in the audit summary section provides some guidance on this matter and contains a future risk rating score of 11, which results in an indicative audit frequency of 18 months.

PARTICIPANT RESPONSE

FOGY acknowledge the non-compliances that have been identified and have made process changes to ensure these are managed better should the same or similar issue arise again.

It is noted that all the non-compliances related to manual processes that had to be done due to switching related complexities that the Automation was not able to address (Escalations for manual intervention, such as RR Rejections, Withdraws or other oddities that arise during the switching process).

All Automated processes performed well and were compliant, and there are now additional checks and validations in place for any Manual interactions that may need to occur in the future, and the FOGY team have been provided additional training to support these processes.

FOGY will also be adopting the recommendations as outlined in the Audit report in respect to adding additional information to any Estimated datasets to simplify the reporting capabilities.