

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT

VERITEK

For

OPUNAKE HYDRO LIMITED

Prepared by: Tara Gannon

Date audit commenced: 13 November 2017

Date audit report completed: 4 December 2017

Audit report due date: 31 December 2017

TABLE OF CONTENTS

Executive summary	6
Audit summary	7
Non-compliances	7
Recommendations	10
Issues	10
1. Administrative.....	11
1.1. Exemptions from Obligations to Comply with Code (Section 11).....	11
1.2. Structure of Organisation	11
1.3. Persons involved in this audit.....	12
1.4. Use of Agents (Clause 15.34).....	12
1.5. Hardware and Software	12
1.6. Breaches or Breach Allegations.....	12
1.7. ICP Data	12
1.8. Authorisation Received	13
1.9. Scope of Audit	13
1.10. Summary of previous audit	15
2. Operational Infrastructure.....	18
2.1. Relevant information (Clause 10.6, 11.2, 15.2).....	18
2.2. Provision of information (Clause 15.35).....	20
2.3. Data transmission (Clause 20 Schedule 15.2)	20
2.4. Audit trails (Clause 21 Schedule 15.2).....	21
2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)..	22
2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))	22
2.7. Physical location of metering installations (Clause 10.35(1)&(2))	23
2.8. Trader contracts to permit assignment by the Authority (Clause 11.15B)	23
2.9. Connection of an ICP (Clause 10.32)	25
2.10. Temporary Electrical Connection of an ICP (Clause 10.33(1)).....	25
2.11. Electrical Connection of Point of Connection (Clause 10.33A)	26
2.12. Arrangements for line function services (Clause 11.16)	27
2.13. Arrangements for metering equipment provision (Clause 10.36)	27
3. Maintaining registry information.....	28
3.1. Obtaining ICP identifiers (Clause 11.3).....	28
3.2. Providing registry information (Clause 11.7(2))	28
3.3. Changes to registry information (Clause 10 Schedule 11.1)	29
3.4. Trader responsibility for an ICP (Clause 11.18)	31
3.5. Provision of information to the registry manager (Clause 9 Schedule 11.1)	32
3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1).....	34
3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)	34
3.8. Management of “active” status (Clause 17 Schedule 11.1).....	35
3.9. Management of “inactive” status (Clause 19 Schedule 11.1).....	36
3.10. ICPs at new or ready status for 24 months (Clause 15 Schedule 11.1).....	36
4. Performing customer and embedded generator switching.....	38
4.1. Inform registry of switch request for ICPs - standard switch (Clause 2 Schedule 11.3)..	38

4.2.	Losing trader response to switch request and event dates - standard switch (Clauses 3 and 4 Schedule 11.3)	38
4.3.	Losing trader must provide final information - standard switch (Clause 5 Schedule 11.3)	40
4.4.	Retailers must use same reading - standard switch (Clause 6(1) and 6A Schedule 11.3)	41
4.5.	Non-half hour switch event meter reading - standard switch (Clause 6(2) and (3) Schedule 11.3)	42
4.6.	Disputes - standard switch (Clause 7 Schedule 11.3).....	42
4.7.	Gaining trader informs registry of switch request - switch move (Clause 9 Schedule 11.3)	42
4.8.	Losing trader provides information - switch move (Clause 10(1) Schedule 11.3)	43
4.9.	Losing trader determines a different date - switch move (Clause 10(2) Schedule 11.3)	45
4.10.	Losing trader must provide final information - switch move (Clause 11 Schedule 11.3)	46
4.11.	Gaining trader changes to switch meter reading - switch move (Clause 12 Schedule 11.3)	46
4.12.	Gaining trader informs registry of switch request - gaining trader switch (Clause 14 Schedule 11.3).....	47
4.13.	Losing trader provision of information - gaining trader switch (Clause 15 Schedule 11.3)	48
4.14.	Gaining trader to advise the registry manager - gaining trader switch (Clause 16 Schedule 11.3).....	49
4.15.	Withdrawal of switch requests (Clauses 17 and 18 Schedule 11.3).....	49
4.16.	Metering information (Clause 21 Schedule 11.3)	51
4.17.	Switch saving protection (Clause 11.15AA to 11.15AB).....	51
5.	Maintenance of unmetered load	53
5.1.	Maintaining shared unmetered load (Clause 11.14).....	53
5.2.	Unmetered threshold (Clause 10.14 (2)(b))	54
5.3.	Unmetered threshold exceeded (Clause 10.14 (5))	54
5.4.	Distributed unmetered load (Clause 11 Schedule 15.3, Clause 15.37B).....	55
6.	Gathering raw meter data	56
6.1.	Electricity conveyed & notification by embedded generators(Clause 10.13, Clause 10.24 and 15.13)	56
6.2.	Responsibility for metering at GIP(Clause 10.26 (6), (7) and (8)).....	57
6.3.	Certification of control devices (Clause 33 Schedule 10.7 and clause 2(2) Schedule 15.3)	57
6.4.	Reporting of defective metering installations (Clause 10.43(2) and (3))	58
6.5.	Collection of information by certified reconciliation participant (Clause 2 Schedule 15.2)	58
6.6.	Derivation of meter readings (Clause 3(1), 3(2) and 5 Schedule 15.2)	59
6.7.	NHH meter reading application (Clause 6 Schedule 15.2)	61
6.8.	Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)	61
6.9.	NHH meters interrogated annually (Clause 8(1) and (2) Schedule 15.2)	63
6.10.	NHH meters 90% read rate (Clause 9(1) and (2) Schedule 15.2)	64
6.11.	NHH meter interrogation log (Clause 10 Schedule 15.2)	65
6.12.	HHR data collection (Clause 11(1) Schedule 15.2)	65
6.13.	HHR interrogation data requirement (Clause 11(2) Schedule 15.2)	66
6.14.	HHR interrogation log requirements (Clause 11(3) Schedule 15.2).....	67
7.	Storing raw meter data	68
7.1.	Trading period duration (Clause 13 Schedule 15.2).....	68
7.2.	Archiving and storage of raw meter data (Clause 18 Schedule 15.2)	68
7.3.	Non metering information collected / archived (Clause 21(5) Schedule 15.2).....	69

8.	Creating and managing (including validating, estimating, storing, correcting and archiving) volume information.....	70
8.1.	Correction of NHH meter readings (Clause 19(1) Schedule 15.2).....	70
8.2.	Correction of HHR metering information (Clause 19(2) Schedule 15.2).....	71
8.3.	Error and loss compensation arrangements (Clause 19(3) Schedule 15.2).....	71
8.4.	Correction of HHR and NHH raw meter data (Clause 22(1) and (2) Schedule 15.2).....	72
9.	Estimating and validating volume information.....	73
9.1.	Identification of readings (Clause 3(3) Schedule 15.2).....	73
9.2.	Derivation of volume information (Clause 3(4) Schedule 15.2).....	73
9.3.	Meter data used to derive volume information (Clause 3(5) Schedule 15.2).....	74
9.4.	Half hour estimates (Clause 15 Schedule 15.2).....	74
9.5.	NHH metering information data validation (Clause 16 Schedule 15.2).....	75
9.6.	Electronic meter readings and estimated readings (Clause 17 Schedule 15.2).....	75
10.	Provision of metering information to the pricing manager in accordance with subpart 4 of Part 13 (clause 15.38(1)(f))	78
10.1.	Generators to provide HHR metering information (Clause 13.136)	78
10.2.	Unoffered & intermittent generation provision of metering information (Clause 13.137).....	78
10.3.	Loss adjustment of HHR metering information (Clause 13.138).....	79
10.4.	Notification of the provision of HHR metering information (Clause 13.140)	79
11.	Provision of submission information for reconciliation.....	80
11.1.	Buying and selling notifications (Clause 15.3).....	80
11.2.	Calculation of ICP days (Clause 15.6)	80
11.3.	Electricity supplied information provision to the reconciliation manager (Clause 15.7).....	82
11.4.	HHR aggregates information provision to the reconciliation manager (Clause 15.8)	84
12.	Submission computation	86
12.1.	Daylight saving adjustment (Clause 15.36)	86
12.2.	Creation of submission information (Clause 15.4).....	86
12.3.	Allocation of submission information (Clause 15.5)	87
12.4.	Grid owner volumes information (Clause 15.9).....	87
12.5.	Provision of NSP submission information (Clause 15.10)	88
12.6.	Grid connected generation (Clause 15.11).....	88
12.7.	Accuracy of submission information (Clause 15.12)	89
12.8.	Permanence of meter readings for reconciliation (Clause 4 Schedule 15.2).....	89
12.9.	Reconciliation participants to prepare information (Clause 2 Schedule 15.3)	91
12.10.	Historical estimates and forward estimates (Clause 3 Schedule 15.3).....	94
12.11.	Historical estimate process (Clause 4 and 5 Schedule 15.3)	96
12.12.	Forward estimate process (Clause 6 Schedule 15.3).....	98
12.13.	Compulsory meter reading after profile change (Clause 7 Schedule 15.3).....	101
13.	Submission format and timing.....	102
13.1.	Provision of submission information to the RM (Clause 8 Schedule 15.3)	102
13.2.	Reporting resolution (Clause 9 Schedule 15.3)	102
13.3.	Historical estimate reporting to RM (Clause 10 Schedule 15.3)	103
	Conclusion	106
	Non-compliances	107
	Recommendations	110

Issues	110
Participant response	111

EXECUTIVE SUMMARY

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

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

OPHL's compliance is reliant on the compliance of their agents:

HHR Agents	NHH Agents
Simply Energy	Simply Energy
EMS	EMS
EDMI	Datacol
AMS	Delta <i>until 30/09/2017</i>
	Wells <i>from 01/11/2017</i>

Because EMS' report is more than seven months old on OPHL's audit date, I confirmed the following as part of OPHL's audit:

- there have been no changes to EMS' systems or processes affecting OPHL
- no defective HHR meters have been identified
- no clock synchronisation errors outside the allowable tolerances have occurred
- that some corrections have occurred during the audit period, (I reviewed the corrections identified); and
- that some estimates have occurred during the audit period, (I reviewed the estimates identified).

Compliance has improved since the previous audit, notably:

- all recommendations made in the previous audit have been implemented and cleared
- issues relating to as billed submissions have been resolved, and the relationship between as billed and submitted data is now close
- a high level of compliance was achieved for switching processes, except AN file content; and
- registry validation processes are robust.

There have been improvements to reconciliation processes, with some previous non-compliances cleared, and corrected data provided through the revision process. Some issues remain, primarily in relation to the classification and calculation of historic estimate, and use of permanent estimates.

This audit found 17 non-compliances, and I note several of these stemmed from the issues with classification of historic estimate. No recommendations or issues were raised. The matters identified are shown in the tables below.

The next audit frequency table indicates that the next audit be due in 12 months, and I agree with this recommendation.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	0000536719NR293 was temporarily recorded with unmetered load and trader unmetered details on the registry when no unmetered load was connected.	Strong	Low	1	Cleared. The registry has been updated.
Assignment of contracts by the Authority	2.8	11.15B	OPHL's Contract with Customers For Delivered Electricity does not specifically cover assignment by the Electricity Authority in the event of trader default.	Moderate	Low	2	Identified
Changes to registry information	3.3	10 Schedule 11.1	The registry was not updated within five business days for some status and MEP nomination events.	Moderate	Low	2	Identified
Provision of registry information	3.5	9 Schedule 11.1	Two ICPs were updated to active status more than five business days after the event.	Moderate	Low	2	Identified
Losing trader response to standard switch request	4.2	3 and 4 Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for 178 ICPs with advanced meters.	Weak	Low	3	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Losing trader response to switch move request	4.8	10(1) Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for two ICPs with advanced meters. One AN had backdated proposed switch date.	Weak	Low	3	Identified
Switch withdrawals	4.15	17 and 18 Schedule 11.3	One AW was issued two business days late.	Strong	Low	1	Identified, strong controls are already in place
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	Datacol do not conduct checks for phase failure. Meter condition checks are not completed for customer read ICP 0002995060CN7C2.	Strong	Low	1	Identified
Reads during the period of supply	6.8	7(1) and (2) Schedule 15.2	Eight ICPs did not have an actual read recorded during the period of supply.	Moderate	Low	2	Identified
Meter event reporting	9.6	17 Schedule 15.2	AMI event logs are not monitored for Arc meters.	Strong	Low	1	Identified
HHR aggregates	11.4	15.8	HHR aggregates file does not contain electricity supplied information.	Strong	Low	1	Identified
Permanent estimates	12.8	4 Schedule 15.2	Some estimated readings are not replaced with permanent estimates by revision 14.	Moderate	Low	2	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Submission preparation	12.9	2 Schedule 15.3	<p>Some minor issues have resulted in:</p> <ul style="list-style-type: none"> incorrect labelling of forward and historic estimate. incorrect apportionment of consumption between months where an ICP has a start date within the month. 	Moderate	Low	2	Disputed
Historic and forward estimate	12.10	3 Schedule 15.3	<p>Historic estimate is labelled as forward estimate where reconciliation manager published shape files are unavailable for the entire read period.</p> <p>Classification of customer reads as actual for ICP 0002995060CN7C2 results in historic estimate being recorded where forward estimate should be recorded.</p>	Moderate	Low	2	Disputed
Historic estimate process	12.11	4 and 5 Schedule 15.3	<p>Customer readings for ICP 0002995060CN7C2 were treated as actual readings when calculating historic estimate.</p> <p>Madras treats readings as though they occur at the end of the day, resulting incorrect apportionment of some consumption between months for switch ins and new connections.</p>	Moderate	Low	2	Investigating

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Forward estimate	12.12	6 Schedule 15.3	The accuracy threshold was not met for one month.	Strong	Low	1	Identified
Historic estimate reporting	13.3	10 Schedule 15.3	Historic estimate thresholds were not met for some revisions.	Moderate	Low	2	Identified
Future Risk Rating						30	

Future Risk Rating	0	1-3	4-15	16-40	41-55	55+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Description	Recommendation
		Nil	

ISSUES

Subject	Section	Description	Issue
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

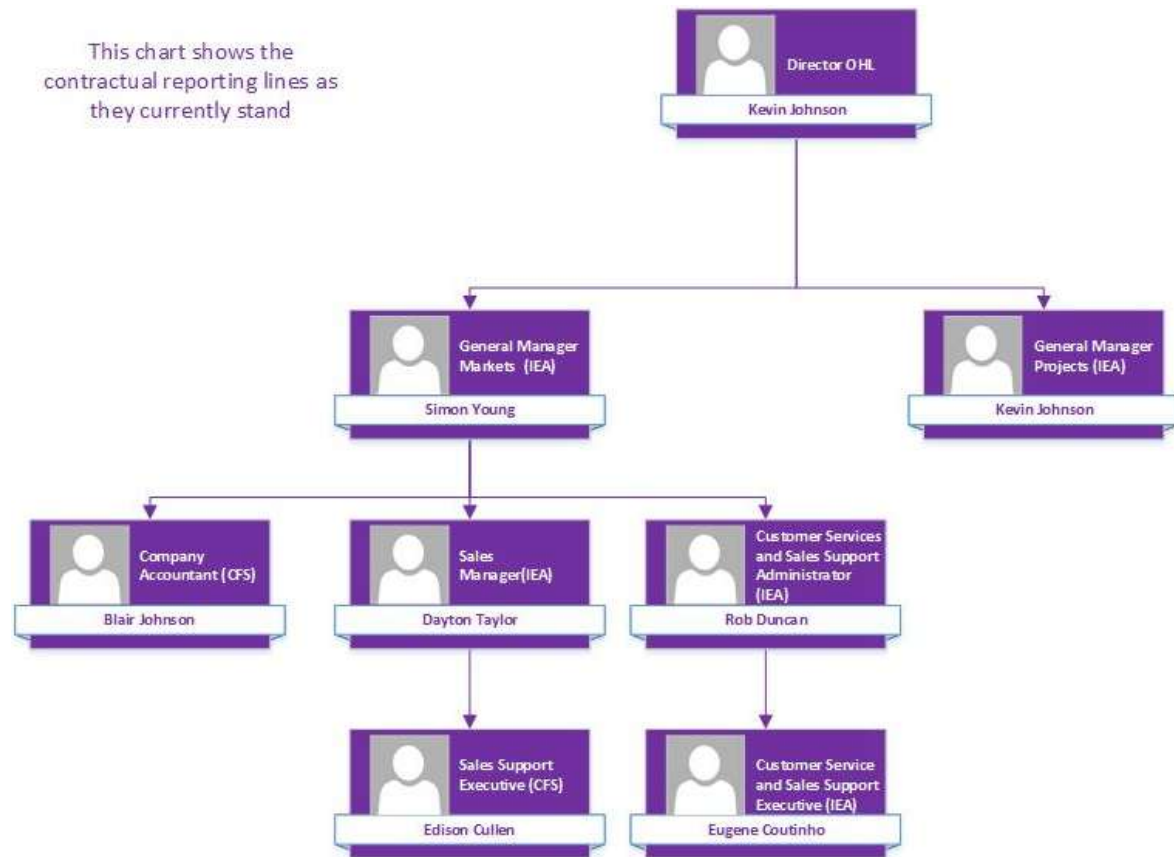
Audit observation

Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

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

1.2. Structure of Organisation



1.3. Persons involved in this audit

Auditor:

Name	Company
Tara Gannon	Veritek Limited

Personnel assisting with this audit:

Name	Title	Company
Stephen Kemp	Operations Manager	Simply Energy
Vinh Nguyen	Data Analyst	EMS

1.4. Use of Agents (Clause 15.34)

Code reference

Clause 15.34

Code related audit information

A reconciliation participant who uses an agent

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

Audit observation

Use of agents was discussed.

Audit commentary

The agents listed in **section 1.9** perform OPHL's responsibilities.

1.5. Hardware and Software

The hardware and software used is recorded in each agent's report.

1.6. Breaches or Breach Allegations

OPHL has had no alleged breaches recorded by the Electricity Authority between 01/11/2016 and 08/11/2017.

1.7. ICP Data

Metering Category	(2017)	(2016)	(2015)
1	1,231	743	384

2	213	196	113
3	24	31	23
4	10	8	4
5	-	-	-
9	84	65	1

Status	Number of ICPs (2017)	Number of ICPs (2016)	Number of ICPs (2015)
Active (2,0)	1,454	968	525
Inactive – new connection in progress (1,12)	-	-	-
Inactive – electrically disconnected vacant property (1,4)	7	4	1
Inactive – electrically disconnected remotely by AMI meter (1,7)	-	1	-
Inactive – electrically disconnected at pole fuse (1,8)	1	1	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	4	4	8
Inactive – reconciled elsewhere (1,5)	-	-	-
Decommissioned (3)	96	66	1

1.8. Authorisation Received

All information was provided directly.

1.9. Scope of Audit

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

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

The table below shows the agents used by OPHL and their areas of responsibility.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks		MEP
	HHR	NHH	
(a) Maintaining Registry information and performing switching	Simply Energy	Simply Energy	
(b) Gathering and storing raw meter data	AMS EMS EDMI	Datacol Delta <i>until 30/09/2017</i> Wells <i>from 01/11/2017</i>	AMS Arc Innovations FCLM Metrix WEL Networks
(c)(iii) Creation and management of HHR & NHH volume information	EMS AMS EDMI	Simply Energy EMS	
(da) - delivery of electricity supplied information under clause 15.7	Simply Energy	Simply Energy	
(db) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8	EMS	EMS	
(e) Provision of submission information for reconciliation	EMS	EMS	

This report only contains details of those areas where issues were identified or where additional analysis was conducted specifically for OPHL. The agents' reports contain all the remaining detail.

1.10. Summary of previous audit

OPHL provided a copy of the report from the audit conducted in January 2017 by Tara Gannon of Veritek Ltd. Further comment is made in the relevant sections of this report.

Table of non-compliance

Subject	Section	Clause	Non-compliance	Status
Provision of Complete and Accurate Information	1.9	15.2 of part 15	Inaccurate information used for submission.	Partially cleared. The issues from the previous audit have been resolved as described in section 2.1 , but some non-compliance still exists.
Losing Trader Response to Switch Request	2.1.2	3 of Schedule 11.3	An incorrect AN response code was provided for 0007117408RNF25. AD (advanced metering) applied, but AA (accept and acknowledge) was used.	Still existing. Refer to section 4.2 .
Gaining Trader Changes to Switch Read	2.1.5	6 of schedule 11.3	Two late RR files for transfer switches, both for ICP 0000183037TPFB4.	Cleared. Refer to section 4.4 .
Gaining Trader Changes to Switch Read	2.2.3	12 of schedule 11.3	One late RR file for a switch move.	Cleared. Refer to section 4.11 .
Losing Trader Response and Provision of Final Information	2.3.3	16 of Schedule 11.3	Three late CS files for half hour switches.	Cleared. No late CS files were recorded. Refer to section 4.14 .
Changes to Registry Information	2.9.2	10 of schedule 11.1	21 late ICP status changes, and 121 late trader information changes.	Still existing. Refer to section 3.3 .
Interrogate Meters Once	3.3.2	7(1) and 7(2) of schedule 15.2	One ICP was not read during the period of supply.	Still existing. Refer to section 6.8 .

Subject	Section	Clause	Non-compliance	Status
Electricity Supplied	4.2	15.7 of part 15	Electricity supplied reporting inaccurate.	Cleared. Refer to section 11.3.
HHR Aggregates	4.3	15.8 of part 15	HHR aggregates file does not contain electricity supplied information.	Still existing. Refer to section 11.4.
Permanence of Meter Readings for Reconciliation	5.1.2	4 of schedule 15.2	Not all estimates replaced at R14.	Still existing. Refer to section 12.8.
Creation of Submission Information	5.1.3	15.5(1) & 15.12 of part 15 & 2 of schedule 15.3	Some errors in submission information.	Partially cleared. Refer to section 12.9.
Historical Estimate Process	5.1.4	4 & 5 of schedule 15.3	Incorrect HE calculations.	Still existing. Refer to section 12.11.
Forward Estimate Process	5.1.5	6 & 10(3) of Schedule 15.3	The accuracy of the initial submission, in comparison to each subsequent revision is not within 15% and within 100,000kWh.	Still existing. Refer to section 12.12.
Historical Estimates	5.2.4	10 of schedule 15.3	HE targets not met for some NSPs.	Still existing. Refer to section 13.3.
Phase failure	3.3.1	5 (c) of schedule 15.2 Check	Check for phase failure not conducted and recorded by Delta	Cleared for Delta. Refer to section 6.6.

Table of Recommendations

Subject	Section	Clause	Recommendation for Improvement	Remedial Action
Embedded generation capacity	1.8.5	10.13 of part 10	Liaise with relevant network and MEP to confirm and update the generation capacity for ICP 1001131304LC8ED.	Cleared. Refer to section 6.1.
Registry Data Discrepancies	2.9.8	11 of schedule 11.1	Liaise with relevant MEP to confirm the correct number of meter channels for ICP 0002623240WFD23.	Cleared. The registry has been updated to show one meter channel. Refer to section 2.1.
Changes to Unmetered Load	2.11.2	9(1)(f) & (g) of schedule 11.1	Liaise with relevant Distributor to confirm if UML exists for ICP 0000536652NR7E6.	Cleared. The registry has been updated to remove the distributor unmetered load details. Refer to section 2.1.

Table of Issues

Subject	Section	Clause	Issue	Action
			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 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 as part of Simply Energy's agent audit.

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

Audit commentary

Simply Energy has processes to identify and resolve registry discrepancies in accordance with this clause. This validation identifies discrepancies between the registry, Simply Energy's Salesforce system and data sent to EMS' Madras system.

The registry list was reviewed and found one ICP which was temporarily recorded with incorrect unmetered load details. This is recorded as non-compliance below.

Issue	2017 Qty	Comments
Blank ANZSIC codes	-	Compliant.
ANZSIC "T999" not stated	-	Compliant.
ANZSIC "T994" don't know	-	Compliant.
ANZSIC "T998 "response outside of scope"	-	Compliant.
UML load = zero	-	Compliant.
Incorrect UML load	1	0000536719NR293 was temporarily recorded with unmetered load and trader unmetered details on the registry when no unmetered load was connected. The registry has now been corrected effective from 19/04/2017.
No MEP recorded or nominated and UML= "N"	-	Compliant.

Issue	2017 Qty	Comments
Shared unmetered load incorrect	-	Compliant, no shared unmetered load was identified.
ICPs with Distributor unmetered load populated but retail unmetered load is blank and UML flag = N	-	Compliant.
Incorrect profile	-	Compliant.
Active date variance with Initial Energisation Date	-	Compliant.
Active ICP with no MEP	-	Compliant.
Active Category 9 and UML "N"	-	Compliant.

Discrepancies found in the January 2017 audit were re-checked:

- Some inaccurate electricity supplied volumes were submitted between August and November 2016. Revised as billed data has been submitted, and the as billed process is now compliant, as discussed in **section 11.3**.
- 0002623240WFD23 was active with a meter channel count of zero. The MEP has corrected the registry to show one meter channel.
- 0000536652NR7E6 had distributor unmetered details, but an UNM Flag = N and no daily unmetered kWh. The MEP has corrected the registry to show no unmetered load details.

Non-compliance	Description
<p>Audit Ref: 2.1</p> <p>With: Clause 10.6, 11.2, 15.2</p> <p>From: 01-Nov-16</p> <p>To: 18-Apr-17</p>	<p>0000536719NR293 was temporarily recorded with unmetered load and trader unmetered details on the registry when no unmetered load was connected.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>Controls are sufficient to ensure that registry information is correct most of the time. The only discrepancy identified related to unmetered information inherited from the previous trader.</p> <p>The impact is low because the details were correctly recorded in Simply Energy and EMS' systems, so there is no impact on reconciliation. The registry has now been corrected effective from 19/04/2017.</p>

Actions taken to resolve the issue	Completion date	Remedial action status	
Simply Energy confirmed with Northpower that unmetered load did not exist on this ICP and had actually been removed prior to when Opunake switched the site to them.	November 2017	Cleared	
Preventative actions taken to ensure no further issues will occur	Completion date		
Reporting is in place to pick any Distributor unmetered load on Opunake ICPs	11 December 2017		

Audit outcome

Non-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.

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 processes were reviewed as part of the agent audits.

Audit commentary

Compliance is recorded in the agent audit reports for

- Simply Energy
- AMS
- EDMl
- EMS
- Datacol
- Delta; and
- Wells.

Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Audit observation

Audit trails were reviewed as part of the Simply Energy and EMS agent audits.

Audit commentary

Compliance is recorded in the Simply Energy and EMS audit reports. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

2.5. Retailer responsibility for electricity conveyed - participant obligations (Clause 10.4)

Code reference

Clause 10.4

Code related audit information

If a participant must obtain a consumer's consent, approval, or authorisation, the participant must ensure it:

- *extends to the full term of the arrangement*
- *covers any participants who may need to rely on that consent.*

Audit observation

I reviewed OPHL's Contract with Customers for Delivered Electricity.

Audit commentary

OPHL's Contract with Customers for Delivered Electricity includes consent to access for authorised parties for the duration of the contract.

Audit outcome

Compliant

2.6. Retailer responsibility for electricity conveyed - access to metering installations (Clause 10.7(2),(4),(5) and (6))

Code reference

Clause 10.7(2),(4),(5) and (6)

Code related audit information

The responsible reconciliation participant must, if requested, arrange access for the metering installation to the following parties:

- *the Authority*
- *an ATH*
- *an auditor*
- *an MEP*
- *a gaining metering equipment provider.*

The trader must use its best endeavours to provide access:

- *in accordance with any agreements in place*
- *in a manner and timeframe which is appropriate in the circumstances.*

If the trader has a consumer, the trader must obtain authorisation from the customer for access to the metering installation, otherwise it must arrange access to the metering installation.

The reconciliation participant must provide any necessary facilities, codes, keys or other means to enable the party to obtain access to the metering installation by the most practicable means.

Audit observation

I reviewed OPHL's Contract with Customers for Delivered Electricity, and discussed compliance with these clauses.

Audit commentary

OPHL's Contract with Customers for Delivered Electricity includes consent to access for authorised parties for the duration of the contract. I could not find any examples where OPHL had been unable to arrange access where required. Meter reader access was temporarily refused by the customer for one ICP; this issue has now been resolved.

Audit outcome

Compliant

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

Code reference

Clause 10.35(1)&(2)

Code related audit information

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

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

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

Audit observation

The connection process is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list was examined to determine compliance.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

No new connections with metering category 3 or higher were created during the audit period.

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

I reviewed OPHL’s Contract with Customers for Delivered Electricity.

Audit commentary

OPHL’s Contract with Customers for Delivered Electricity does not specifically cover trader default. This is recorded as non-compliance below.

Non-compliance	Description
Audit Ref: 2.8 With: Clause 11.15B From: entire audit period	OPHL’s Contract with Customers for Delivered Electricity does not specifically cover assignment by the Electricity Authority in the event of trader default. Potential impact: High Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	The controls are rated as moderate and the risk low, because OPHL’s Contract with Customers for Delivered Electricity allows OPHL to transfer all or any of its rights and obligations to someone else, if notification is provided.

Actions taken to resolve the issue	Completion date	Remedial action status
The Participant's standard terms and conditions will be updated to specifically include assignment by the Electricity Authority in the event of trader default at the time that these are updated from April 2018	1/3/2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Monitor communications from the EA in relation to customer contracts	On-going	

Audit outcome

Non-compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

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

Audit observation

The connection process is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list with history and event detail report for 01/11/2016 to 07/11/2017 were reviewed to identify all new connections, and confirm compliance.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. Four new connections were identified, and in all cases OPHL accepted responsibility and had an arrangement with the MEP.

Audit outcome

Compliant

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

Code reference

Clause 10.33(1)

Code related audit information

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

- *they are recorded in the registry as being responsible for the ICP; and*

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

Audit observation

The connection process is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list with history and event detail reports for 01/11/2016 to 25/09/2017 were reviewed to identify all temporary connections.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

No temporary connections were completed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(1)

Code related audit information

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

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

Audit observation

The connection process is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list with history and event detail reports for 01/11/2016 to 25/09/2017 were reviewed to identify all new connections and reconnections.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

The event detail report showed 26 ICPs were updated to active status during the period, including four new connections and 22 reconnections. All the ICPs had one or more final certified metering installation on the connection or reconnection date, and OPHL was recorded as the trader.

The January 2017 audit found ICP 0002623240WFD23 was active with a meter channel count of zero. The MEP has corrected the registry to show that one meter channel is present.

Audit outcome

Compliant

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

The connection and switching processes are managed by Simply Energy, and were reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. OPHL has arrangements in place with all relevant distributors.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

The connection and switching processes are managed by Simply Energy, and were reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. Through Simply Energy, OPHL has arrangements in place with all MEPs who manage metering on their ICPs.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The connection process is managed by Simply Energy, and was reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

Audit outcome

Compliant

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

Code reference

Clause 11.7(2)

Code related audit information

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

Audit observation

The connection process is managed by Simply Energy, and was reviewed as part of their agent audit. Timeliness of new connections is discussed in **section 3.5**.

The registry list with history and event detail report for 01/11/2016 to 07/11/2017 were reviewed to identify all new connections, and confirm compliance.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

The event detail report and registry list were examined and found four new connections during the audit period. Information was provided as required.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 11.1

Code related audit information

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

Audit observation

The registry processes are managed by Simply Energy, and were reviewed as part of their agent audit.

The event detail report for 01/11/2016 to 07/11/2017 was reviewed to confirm compliance.

Audit commentary

Simply Energy’s report found that their processes ensured most updates were processed on time, but some late updates did occur.

The event detail report was examined to confirm whether the registry is updated within five business days when information referred to in clause 9 of schedule 11.1 changes.

Event	Total ICPs	ICPs notified within 5 days	ICPs notified greater than 5 days	Average notification days	Percentage compliant
Change to de-energised - vacant (1,4)	12	12	-	1.3	100%
Change to de-energised ready for decommissioning (1,6)	27	20	7	14.3	74%
Change to de-energised due to meter disconnected (1,9)	1	1	-	2	100%
Change to active – reconnections (2,0)	22	20	2	4.5	91%
Change of MEP	115	97	18	3.9	84%

The registry was not updated within five business days for seven ICPs with inactive ready for decommissioning status, and two ICPs with active status. All late status updates were checked:

- the seven late status updates to ready for decommissioning status occurred due to delays in receiving confirmation that the site was ready to be decommissioned
- one late status update to active was caused by a backdated switch in; the status update was completed within one business day of the CS being received
- I could not confirm the reason for the other late update to active, which was three business days late.

The MEP nomination date was compared to the metering event date for the 18 MEP nominations not sent within five business days of the event date. In ten cases the nomination was made before the metering event date, in six cases on the metering event date, and in one case the business day following the metering event date. The ten latest nominations were checked:

- for ICP 0007301108NV75B, a new MEP was nominated after the first MEP declined, resulting in a delay
- for ICP 0001813835HB99A, the nomination was delayed due to a backdated switch
- for the other eight late nominations, the late update occurred because a backdated event date was applied (Simply Energy's procedures have been updated to prevent backdated event dates from being applied in the future).

Late registry updates are recorded as non-compliance below.

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: entire audit period	The registry was not updated within five business days for some status and MEP nomination events. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate, because registry updates occurred on time most of the time. The risk rating is low, because a small number and proportion of updates were late, and procedures have been improved to reduce the volume of late updates in the future.		
Actions taken to resolve the issue	Completion date	Remedial action status	
The de-energised ready to decommission was from a Network Extension to Customer Network conversion but not all ICPs had been identified when this occurred. Simply Energy is monitoring the Test Houses that MEP's use to see whether one is better than the other for new sites and meter changes.	15 December 2017	Identified	

Preventative actions taken to ensure no further issues will occur	Completion date	
Simply Energy is working with MEP's to refine timelines when sending through confirmation of jobs. We will set up monitoring across Test Houses that MEP's use to use this data when managing expectations with MEP's.	31 March 2018	

Audit outcome

Non-compliant

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

Registry processes are managed by Simply Energy, and were reviewed as part of their agent audit.

The registry list file as at 08/11/2017 was examined to identify whether all active, metered ICPs have an MEP recorded.

The registry list with history and event detail report for 01/11/2016 to 07/11/2017 were reviewed to identify all decommissioned ICPs, and confirm compliance. A typical case sample of 10 ICPs were checked to confirm that a meter reading was obtained prior to the ICP being decommissioned.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

All active, metered ICPs have an MEP recorded.

30 ICPs were decommissioned during the audit period. For 20 of the 30 ICPs, I found that metering had been removed on the registry. A meter reading was obtained prior to the ICP being decommissioned for the sample of 10 ICPs checked.

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The new connection process is managed by Simply Energy, and was reviewed as part of their agent audit.

The event detail report for 01/11/2016 to 07/11/2017 was reviewed to confirm compliance.

Audit commentary

Simply Energy's agent audit report found that their processes ensured most updates were processed on time, but some late updates did occur.

The event detail report was examined to confirm whether the registry was updated within five business days when information referred to in clause 9 of schedule 11.1 changes.

Event	Total ICPs	ICPs notified within 5 days	ICPs notified greater than 5 days	Average notification days	Percentage compliant
Change to active – new connections (2,0)	4	2	2	7.5	50%

The registry was not updated within five business days for two new connections. Both late updates were primarily caused by late receipt of connection paperwork. This is recorded as non-compliance below.

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: November 2016 and April 2017	Two ICPs were updated to active status more than five business days after the event. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, as they will mitigate the risk of late update most of the time. The audit risk rating is low, because only two updates were late, and both were updated within 15 business days.		
Actions taken to resolve the issue		Completion date	Remedial action status
Simply Energy is continuing to work with MEP's on their turnarounds on receiving paperwork on new sites.		30 November 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Adding additional reporting around which Test House is being used for completion jobs to identify possible changes in process. However we will need to work with MEP's on this as they determine the Test House not the Trader normally.		31/03/2018	

Audit outcome

Non-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

ANZSIC codes are maintained by Simply Energy, and were reviewed as part of their agent audit.

ANZSIC codes were examined on the registry list file as at 08/11/2017.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. All active ICPs had a valid ANZSIC code recorded.

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

Unmetered load is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list file as at 08/11/2017 was examined to identify any ICPs where:

- unmetered load is identified by the distributor, but none is recorded by OPHL
- OPHL's unmetered kWh differs from the distributor's unmetered kWh.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. Daily unmetered load is converted to meter readings by Simply Energy, and sent to EMS to be processed in Madras.

All ICPs with unmetered load identified by the distributor have unmetered load details recorded by OPHL. I compared the unmetered daily kWh to the distributor information where possible and found that the unmetered daily kWh was within 0.0 of the manually calculated result.

0000536719NR293 was temporarily recorded with unmetered load and trader unmetered details on the registry when no unmetered load was connected. This is recorded as non-compliance in **section 2.1**, and has now been corrected. There was no impact on reconciliation reporting.

The January 2017 audit made a recommendation to confirm whether unmetered load was connected to ICP 0000536652NR7E6, which had distributor unmetered load recorded, but no trader unmetered load

was recorded. This recommendation has been cleared. The registry has been updated to remove the distributor unmetered load details.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

Statuses are managed by Simply Energy, and status management processes were reviewed as part of their agent audit.

The event detail report for 01/11/2016 to 07/11/2017 was analysed and the findings in relation to the timeliness of updates to registry are recorded in **sections 3.3** and **3.5**.

The event detail report and registry list report were checked for any variances between the initial energisation date and the active date, or meter certification date and active date.

Audit commentary

Simply Energy’s processes to manage the active status were found to be compliant, but non-compliance was recorded because there can be more than one customer per ICP in their system. No OPHL ICPs have more than one customer recorded.

OPHL’s earliest active date was compared to the initial energisation date and meter certification date for the four new connections. Where the initial energisation date had been populated by the distributor, and the certification date was populated by the MEP, OPHL’s active date was consistent. Population of the initial energisation date is a distributor responsibility.

ICP	Active Date	Initial Energisation Date	Certification Date
0000039714HBDC0	28-Mar-17	28-Mar-17	28-Mar-17
0000041822WE54F	18-May-17	18-May-17	18-May-17
0000504861CEA19	08-Nov-16	08-Nov-16	08-Nov-16
1001299930LC349	05-Jul-17	Blank	05-Jul-17

Late status updates to active are recorded as non-compliance in **sections 3.3** and **3.5**.

Audit outcome

Compliant

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

Statuses are managed by Simply Energy, and status management processes were reviewed as part of their agent audit.

The event detail report for 01/11/2016 to 07/11/2017 was analysed and the findings in relation to the timeliness of updates to registry are recorded in **sections 3.3**.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

Late status updates to active are recorded as non-compliance in **sections 3.3**.

A typical case sample of ten ICPs made ready for decommissioning were checked, and found that the status was applied correctly.

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

Monitoring of ICPs at new and ready status is completed by Simply Energy, and was reviewed as part of their agent audit report.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

A gaining trader must advise the registry manager of a switch no later than 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and one or more profile codes associated with that ICP.

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

An event detail report for 01/11/2016 to 07/11/2017 was reviewed to identify AN files issued during the audit period, and assess compliance.

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

Audit commentary

Simply Energy's agent audit report recorded one incorrect AN code had been applied. OPHL applied the AA (accept and acknowledge), AD (advanced metering) and occupied (OC) codes for transfer switches during the audit period. I compared the codes applied to the meter details, and found:

AN response code	Advanced meter	Quantity
AA	Y	178
AA	N	107
AD	Y	59
AD	N	-
OC	Y	

The use of the AA response code for ICPs with advanced meters is recorded as non-compliance below.

The event detail report was examined in relation to OPHL as the "losing trader" for a selection of NHH ICPs. Event dates set by losing trader must be within ten business days of receipt of an NT file. Over a 12 month period, 50% of event dates must be within five business days. Over 50% of event dates were within ten business days of receipt of an NT file.

Code	Total transfer switches	Total within 10 days	Total within 5 days	% within 5 days
OPHL	345	345	229	66.3%

The switch breach report contained no late AN files for transfer switches.

Non-compliance	Description
<p>Audit Ref: 4.2 With: Clauses 3 and 4 Schedule 11.3</p> <p>From: entire audit period</p>	<p>The AA (accept and acknowledge) AN response code was applied for 178 ICPs with advanced meters.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>

Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls over AN response codes are weak, as they are not sufficient to mitigate risk of incorrect codes being applied most of the time.</p> <p>The risk rating is low, because information on the metering was available on the registry and only one proposed AN date was outside the required timeframe.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Staff performing switch losses has been reminded of which response codes to use when sending AN files		11 December 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Apart from following processes the Advanced Meter Flag could be used when creating AN files to avoid incorrect application of these codes. This would be an IT enhancement for 2018.		31 March 2018 approx	

Audit outcome

Non-compliant

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

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

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

The switch breach report contained no late CS files for standard switches.

Audit outcome

Compliant

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within four calendar months of the 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 read change process is managed by Simply Energy, and was reviewed as part of their agent audit.

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

All rejected read change requests were reviewed, to determine whether they were validly rejected.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

The switch breach report contained no late RR or AC files for standard switches.

Two read change requests were rejected by OPHL, in both cases the rejection was valid:

- ICP 0007100695RN91F had a difference of 98 kWh between the CS and RR reads. Both the CS and RR reads were estimates and both traders were using submission type NHH.
- The RR file for ICP 0376264098LC116 recorded the readings transposed between the meters. A second file with the reads recorded on the correct meters was issued, and OPHL accepted.

Audit outcome

Compliant

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

The read change process is managed by Simply Energy, and was reviewed as part of their agent audit.

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

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

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

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 11.3

Code related audit information

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

Audit observation

The read change process is managed by Simply Energy, and was reviewed as part of their agent audit.

Audit commentary

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

Audit outcome

Not applicable

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

Code reference

Clause 9 Schedule 11.3

Code related audit information

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

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

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

An event detail report for 01/11/2016 to 07/11/2017 was reviewed to identify AN files issued during the audit period, and assess compliance.

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

Audit commentary

Simply Energy's agent audit report recorded one incorrect AN code had been applied. OPHL had applied the AA (accept and acknowledge) and AD (advanced metering) codes for switch moves during the audit period. I compared the codes applied to the meter details, and found:

AN response code	Advanced meter	Quantity
AA	Y	2
AA	N	2
AD	Y	2
AD	N	-

The use of the AA code for ICPs with advanced meters is recorded as non-compliance below.

Event dates set by losing trader must be within ten business days of receipt of an NT file, and not earlier than the gaining trader's proposed event date. The event detail report for 01/11/2016 to 07/11/2017 was examined and found:

- the switch for 0006001478TU97C was requested on 17/08/2017 backdated to 01/08/2017. OPHL complied with the requested date
- all other switches had event dates within ten business days after the NT request.

Code	Total switch moves	Backdated switch	Total within 10 days	% within 10 days
OPHL	6	1	5	83.3%

The switch breach report contained no late AN files for switch moves.

Non-compliance	Description
<p>Audit Ref: 4.8 With: Clause 10(1) Schedule 11.3</p> <p>From: May and November 2017</p>	<p>The AA (accept and acknowledge) AN response code was applied for two ICPs with advanced meters.</p> <p>One AN had backdated proposed switch date.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>
Audit risk rating	Rationale for audit risk rating

Low	<p>Controls are rated as weak overall:</p> <ul style="list-style-type: none"> • Controls over event dates are strong and ensure that event dates are compliant almost all the time. • Controls over AN response codes are weak, as they are not sufficient to mitigate risk of incorrect codes being applied most of the time. <p>The risk rating is low, because information on the metering was available on the registry. Only one switch move AN had a backdated proposed switch date, and this was the date that the gaining trader had requested.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
Staff performing switch losses has been reminded of which response codes to use when sending AN files	11 December 2017	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Apart from following processes the Advanced Meter Flag could be used when creating AN files to avoid incorrect application of these codes. This would be an IT enhancement for 2018.	31 March 2018 approx	

Audit outcome

Non-compliant

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

Code reference

Clause 10(2) Schedule 11.3

Code related audit information

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

An event detail report for 01/11/2016 to 07/11/2017 was reviewed to identify instances where OPHL had determined a different event date, and assess compliance.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. The switch event date matched the AN proposed event date for all six switch moves.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 11.3

Code related audit information

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

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

Audit commentary

Compliance is recorded in Simply Energy's agent audit report for CS file content, but non-compliance was recorded for some late CS files. This issue did not affect OPHL, the switch breach report contained no late CS files for transfer switches.

Audit outcome

Compliant

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

Code reference

Clause 12 Schedule 11.3

Code related audit information

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

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

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

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

An event detail report and registry list for 01/11/2016 to 07/11/2017 were reviewed to assess compliance.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report for read change processes, but non-compliance was recorded for one late RR file. This issue did not affect OPHL, the switch breach report contained no late RR or AC files for switch moves.

No read changes were issued or received under Clause 12 of Schedule 11.3.

Audit outcome

Compliant

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

Code reference

Clause 13 Schedule 11.3

Code related audit information

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

- *a half hour metering installation (that is not a category 1 or 2 metering installation) at an ICP with a submission type of half hour in the registry and an AMI flag of "N"; or*
- *a half hour metering installation at an ICP that has a submission type of half hour in the registry and an AMI flag of "N" and is traded by the losing trader as non-half hour; or*
- *a non half hour metering installation at an ICP at which the losing trader trades electricity through a half hour metering installation with an AMI flag of "N".*

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

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

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

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

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

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

An event detail report for 01/11/2016 to 07/11/2017 was reviewed to identify AN files issued during the audit period, and assess compliance.

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

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. OPHL appropriately applied the AA (accept and acknowledge) AN response code for all HH switches during the audit period.

The switch breach report contained no late AN files for HH switches.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

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

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

The switch breach report contained no late CS files for HH switches.

Audit outcome

Compliant

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

Code reference

Clauses 17 and 18 Schedule 11.3

Code related audit information

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

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

- *for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):*
 - o *the participant identifier of the trader making the withdrawal request (clause 18(c)(i));*
 - and*
 - o *the withdrawal advisory code published by the Authority (clause 18(c)(ii))*
- *within five business days after receiving notice from the registry manager of a switch, the trader receiving the withdrawal must advise the registry manager that the switch withdrawal request is accepted or rejected. A switch withdrawal request must not become effective until accepted by the trader who received the withdrawal (clause 18(d))*
- *on receipt of a rejection notice from the registry manager, in accordance with clause 18(d), a trader may re-submit the switch withdrawal request for an ICP in accordance with clause 18(c).*

All switch withdrawal requests must be resolved within 10 business days after the date of the initial switch withdrawal request (clause 18(e))

- if the trader requests that a switch request be withdrawn, and the resolution of that switch withdrawal request results in the switch proceeding, within two business days after receiving notice from the registry manager in accordance with clause 22(b), the losing trader must comply with clauses 3,5,10 and 11 (whichever is appropriate) and the gaining trader must comply with clause 16 (clause 18(f)).

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

The content of a diverse characteristics sample of ten switch withdrawal requests were checked to confirm whether the reason codes applied were correct.

The switch breach history report for the audit period was reviewed. The event detail report was also analysed to confirm timeliness of switch withdrawal acknowledgements.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report. The sample of ten switch withdrawal files checked had correct withdrawal codes applied.

The switch breach report contained no late NW or AW files. Review of the event detail report found an AW for 1001288734LCD09 was issued seven business days after the receipt of the NW, due to a delay in receiving information from the customer. This is recorded as non-compliance below.

Non-compliance	Description		
Audit Ref: 4.15 With: Clauses 17 and 18 Schedule 11.3 From: 06-Jun-17 To: 08-Jun-17	One AW was issued two business days late. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong, because only one of the 136 AW files issued was late. The audit risk is rated as low, because the file was only two business days late.		
Actions taken to resolve the issue		Completion date	Remedial action status
Due to only one issue we don’t believe there is any actions from this audit.		13/12/2017	Identified, strong controls are already in place
Preventative actions taken to ensure no further issues will occur		Completion date	
No action required		13/12/2017	

Audit outcome

Non-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 switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report. OPHL's policy regarding the management of meter reading expenses is compliant.

Audit outcome

Compliant

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

Code reference

Clause 11.15AA to 11.15AB

Code related audit information

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

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

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

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

Audit observation

The switching process is managed by Simply Energy, and was reviewed as part of their agent audit.

An event detail report for 01/11/2016 to 07/11/2017 was reviewed to assess compliance.

The Registry static data for switch saves protection was reviewed.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

OPHL is not a switch save protected retailer.

I checked the event detail report for all withdrawn switches during the audit period. There was one switch that was withdrawn with the code "CX" applied before the switch completion date; it was issued to a retailer who was not save protected.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

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

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

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

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

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

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

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

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

Audit observation

Unmetered load is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list file as at 08/11/2017 was examined to identify all ICPs with shared unmetered load.

Audit commentary

Simply Energy's agent audit report confirms that they do not supply an ICPs with shared unmetered load, and have processes to identify new shared unmetered load.

OPHL does not supply any ICPs that have shared 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

Unmetered load is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list file as at 08/11/2017 was examined to identify all ICPs with unmetered load between 3000 and 6000 kWh per annum.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

No ICPs have standard unmetered load over 3000 kWh per annum.

0000536719NR293 was temporarily recorded on the registry with daily unmetered kWh of 22.55 when no unmetered load was connected. This is recorded as non-compliance in **section 2.1**, and has now been corrected.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

Unmetered load is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list file as at 08/11/2017 was examined to identify all ICPs with unmetered load over 3000 kWh per annum.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

No ICPs have standard unmetered load over 3000 kWh per annum.

0000536719NR293 was temporarily recorded on the registry with daily unmetered kWh of 22.55 when no unmetered load was connected. This is recorded as non-compliance in **section 2.1**, and has now been corrected.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 15.3, Clause 15.37B

Code related audit information

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

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

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

Audit observation

Unmetered load is managed by Simply Energy, and was reviewed as part of their agent audit.

The registry list file as at 08/11/2017 was examined to identify all DUML ICPs.

Audit commentary

Simply Energy's audit report confirmed that they do not deal with any DUML ICPs.

OPHL does not have responsibility for any DUML ICPs.

Audit outcome

Not applicable

6. GATHERING RAW METER DATA

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

Code reference

Clause 10.13, Clause 10.24 and Clause 15.13

Code related audit information

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

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

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

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

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

Audit observation

Simply Energy manages compliance with these clauses.

The registry list and event detail reports for 01/11/2016 to 07/11/2017 were examined to determine compliance.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

OPHL has 11 active ICPs with generation recorded by the distributor. Nine of the ICPs have injection/export metering recorded, ICPs 0000365004HBC2F and 0005372690RN803 did not.

- A site visit was conducted for ICP 0000365004HBC2F, which confirmed that solar panels were installed but switched off until export metering could be installed.
- Orion confirmed that ICP 0005372690RN803 has solar panels installed and in use, but believed that the installation was not injecting energy.

I checked that the correct profile code was applied for the generation type for the nine ICPs with import/export registers, and found them to be correct.

The January 2017 audit recommended ICPs 0080012466PC908 and 1001131304LC8ED, which had zero generation capacity recorded on the registry be followed up with the distributor. Both ICPs were confirmed not to have any generation connected; the generation capacity is still recorded as zero on the registry.

No bridged meters were identified during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

The participant responsible for the metering installation must:

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

Audit observation

The registry list for 01/11/2016 to 07/11/2017 was reviewed.

Audit commentary

OPHL is not responsible for any GIPs, therefore compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

Simply Energy manages compliance with these clauses.

The registry list and event detail reports for 01/11/2016 to 07/11/2017 were examined to determine compliance.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

OPHL uses only the RPS, PV1 and UML profiles for NHH ICPs. No control devices are in use for any of their category 1 and 2 metered ICPs.

Audit outcome

Compliant

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

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

Audit observation

Simply Energy and EMS have processes to identify and report defective meters, which were examined as part of their agent audits.

Audit commentary

Compliance is recorded in Simply Energy and EMS' agent audit reports.

Simply Energy confirmed that one defective NHH meter was identified during the audit period. The fault was reported to the MEP, who replaced the meter. ICP 0002222131WFF27 showed a blank screen and was replaced with a smart meter. A permanent estimate removal read for the faulty meter was estimated based on consumption recorded on the new meter. A correction was processed, and is discussed further in **section 8.1**.

EMS confirmed that no defective HHR meters were identified during the audit period. Because EMS' report is more than seven months old, I also confirmed that there have been no changes to their defective meter processes.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

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

2(6) – The interrogation systems must record:

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

Audit observation

OPHL's agents and MEPs are responsible for the collection of HHR and AMI data. Collection of data and clock synchronisation were reviewed as part of their agent and MEP audits.

- HHR information is collected by AMS, EMS, and EDM I as agents.
- AMI information is collected by AMS, Arc Innovations, FCLM, Metrix, and WEL Networks as MEPs.

Audit commentary

All information used to determine volume information is collected from the services interface or the metering installation by OPHL's agents, or the MEP.

Compliance with this clause has been demonstrated by OPHL's agents and MEPs as part of their agent audits.

Because EMS' audit report is more than seven months old on OPHL's audit date, I confirmed that there have been no changes to clock synchronisation processes, and that no clock synchronisation errors outside permissible limits have occurred during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

- 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

NHH information is provided by Datacol, Delta (up to 30/09/2017), and Wells (from 01/11/2017) as agents. Compliance with these clauses was checked as part of their agent audits.

Simply Energy is responsible for validating meter readings, which are then sent to EMS. These processes were checked as part of their agent audit report.

Audit commentary

Simply Energy's processes for the recording and validation of meter readings were found to be compliant in their agent audit. Non-compliance was recorded in the Simply Energy audit because Datacol did not complete checks for phase failure, this is recorded as non-compliance below.

Compliance is recorded in the Delta and Wells agent audit reports. No examples of meter condition issues were identified for OPHL meters during the audit period.

ICP 0002995060CN7C2 is read by the customer, as site health and safety issues prevent the meter reader from accessing the meter. These reads are treated as actual for reconciliation, although the checks required by clause 5 of Schedule 15.2 are not completed. This is recorded as non-compliance below.

Non-compliance	Description
<p>Audit Ref: 6.6</p> <p>With: Clause 3(1), 3(2) and 5 Schedule 15.2</p> <p>From: 01-Jan-17</p> <p>To: 30-Sep-17</p>	<p>Datacol do not conduct checks for phase failure.</p> <p>Meter condition checks are not completed for customer read ICP 0002995060CN7C2.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating
<p>Low</p>	<p>Controls are rated as strong and the impact as low. OPHL's other meter reading providers are compliant. Only one ICP is customer read.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
Opunake Hydro Ltd are looking to transition all manual reads away from Datacol as they have been identified as non-compliant under clause 5 of Schedule 15.2. Wells are compliant due to conducting these checks. We anticipate this transition will be initiated in the New Year and completed by Q2 2018	30/04/2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Opunake Hydro Ltd will discuss with Wells the opportunity for minimum annual readings of this particular metered supply 0002995060CN7C2 at our cost to meet reading and phase checking requirements	28/02/2018	

Audit outcome

Non-compliant

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

Code reference

Clause 6 Schedule 15.2

Code related audit information

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

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

Audit observation

The process for the application of meter readings was examined as part of Simply Energy’s agent audit.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

Audit outcome

Compliant

6.8. Interrogate meters once (Clause 7(1) and (2) Schedule 15.2)

Code reference

Clause 7(1) and (2) Schedule 15.2

Code related audit information

Each reconciliation participant must ensure that a validated meter reading is obtained in respect of every meter register for every non half hour metered ICP for which the participant is responsible, at least once

during the period of supply to the ICP by the reconciliation participant, and used to create volume information.

This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

If exceptional circumstances prevent a reconciliation participant from obtaining the validated meter reading, the reconciliation participant is not required to comply with clause 7(1).

Audit observation

The process to manage missed reads was reviewed as part of Simply Energy’s agent audit report. All eight ICPs not read during the period of supply were reviewed.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

A validated meter reading must be obtained in respect of every meter register for every NHH metered ICP for which the participant is responsible at least once during the period of supply to the ICP by the reconciliation participant, unless exceptional circumstances prevent this from occurring. This may be a validated meter reading at the time the ICP is switched to, or from, the reconciliation participant.

The eight ICPs not read during the period of supply were reviewed, all were supplied for 80 days or less:

- two were supplied for less than five days
- reads were scheduled for three sites supplied for 50 days or less, but the sites switched out before the scheduled read date
- scheduled reads were attempted for three ICPs supplied for 38, 75 and 80 days but were unable to be obtained because of access issues.

Not obtaining a read during the period of supply for some ICPs is recorded as non-compliance below.

Non-compliance	Description
<p>Audit Ref: 6.8 With: Clause 7(1) and (2) Schedule 15.2 From: entire audit period</p>	<p>Eight ICPs did not have an actual read recorded during the period of supply. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
<p>Low</p>	<p>Controls are rated as moderate because they will mitigate the risk most of the time, but ICPs may remain unread where they are supplied for a short period. The impact is assessed as low, because in all cases, the period of supply was less than three months. For all ICPs supplied for over five days, a read had been scheduled and/or attempted.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
Closer monitoring on no read events to ensure less sites with no reads.	31/03/2018.	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Continual monitoring of the sites with no reads and also adding more Advanced Meters.	30/06/2018	

Audit outcome

Non-compliant

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

Code reference

Clause 8(1) and (2) Schedule 15.2

Code related audit information

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

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

Audit observation

The processes to manage missed reads and report on meter reading frequency were reviewed as part of Simply Energy's agent audit report.

Monthly meter reading frequency reports for the months of July to September 2017 were provided. All three ICPs not read in the previous 12 months on these reports were reviewed to determine whether reasonable endeavours were used to attain reads, and if exceptional circumstances existed.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
July 2017	106	2	2	99.63%
August 2017	112	3	3	99.45%
September 2017	113	3	3	99.46%

The three unread ICPs were reviewed. Simply Energy could demonstrate that two of the three ICPs were vacant, and exceptional circumstances existed. In the other case a metering issue is present, and the reasonable endeavours requirement was met.

Audit outcome

Compliant

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

Code reference

Clause 9(1) and (2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

The processes to manage missed reads and report on meter reading frequency were reviewed as part of Simply Energy's agent audit report.

Monthly meter reading frequency reports for the months of July to September 2017 were provided. I reviewed eight NSPs where less than 90% of ICPs were read, to determine whether exceptional circumstances exist, and if best endeavours had been used to obtain readings.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	ICPs unread for 4 months	Overall percentage read
July 2017	130	9	24	97.30%
August 2017	135	7	19	98.01%
September 2017	149	10	25	97.87%

Compliance with the four month reading requirements was not achieved for all NSPs. I reviewed eight of the affected NSPs to determine whether exceptional circumstances exist, and if best endeavours had been used to obtain readings.

- for two ICPs, appropriate action was taken and resulted in reads being obtained
- one ICP was vacant, and exceptional circumstances existed

- for four ICPs, access issues or incorrect location information prevented the ICP from being read; in all cases best endeavours were used to obtain location information and arrange access
- for one AMI meter a communication fault prevented reads from being obtained, and best endeavours were used to resolve the issue and arrange a special meter reading.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.2

Code related audit information

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

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

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

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

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

Audit observation

OPHL's agents and MEPs are responsible for the collection of NHH data. NHH interrogation logs were reviewed as part of their agent and MEP audits.

- AMI information is provided by AMS, Arc Innovations, FCLM, Metrix, and WEL Networks as MEPs.
- NHH information is provided by Datacol, Delta (up to 30/09/2017), and Wells (from 01/11/2017) as agents.

Audit commentary

Compliance is recorded as part of the MEP and agent audits.

Audit outcome

Compliant

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

Code reference

Clause 11(1) Schedule 15.2

Code related audit information

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

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

Audit observation

HHR information is collected by AMS, EDMI, and EMS as agents. HHR data collection requirements were reviewed as part of their agent audits.

Audit commentary

Compliance with this clause has been demonstrated by AMS, EDMI, and EMS as part of their agent audits. Because EMS' audit report is more than seven months old, I confirmed that that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

HHR information is collected by AMS, EDMI, and EMS as agents. HHR interrogation data requirements were reviewed as part of their agent audits.

Audit commentary

Compliance with this clause has been demonstrated by AMS, EDMI, and EMS as part of their agent audits. Because EMS' audit report is more than seven months old, I confirmed that that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

HHR information is collected by AMS, EDMI, and EMS as agents. HHR interrogation log requirements were reviewed as part of their agent audits.

Audit commentary

Compliance with this clause has been demonstrated by AMS, EDMI, and EMS as part of their agent audits. Because EMS' audit report is more than seven months old, I confirmed that that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

HHR information is collected by AMS, EDMI, and EMS as agents. Trading period duration was reviewed as part of their agent audits.

Audit commentary

Compliance with this clause has been demonstrated by AMS, EDMI, and EMS as part of their agent audits. Because EMS' audit report is more than seven months old, I confirmed that that there have been no changes to their processes since their March 2017 audit.

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

OPHL's agents and MEPs retain a copy of the raw meter data, and their compliance with the archiving and storage requirements was reviewed as part of their agent audits.

Audit commentary

Compliance with this clause has been demonstrated by OPHL's agents and MEPs as part of their agent audits.

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

OPHL does not deal with any non-metering information.

Audit commentary

Not applicable

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

Simply Energy and EMS are responsible for NHH data corrections. Simply Energy processes corrections to meter readings, which are sent to EMS' Madras system for inclusion in reconciliation submissions. Compliance was assessed as part of Simply Energy and EMS' agent audit reports.

Audit commentary

Simply Energy's agent audit confirmed that their correction processes were compliant, and no examples of incorrectly processed NHH corrections were identified for OPHL.

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their correction processes since their March 2017 audit and checked all NHH corrections identified.

I reviewed the two NHH corrections processed during the audit period:

- ICP 0002222131WFF27 showed a blank screen and was replaced with a smart meter. A permanent estimate removal read for the faulty meter was estimated based on consumption recorded on the new meter.
- ICP 0000100352UN104 had a multiplier of 1 recorded on the registry, and the MEP processed a backdated correction to a multiplier of 40. The multiplier was corrected by Simply Energy and EMS, and correct data was provided for submission.

No bridged meters, disconnected ICPs with usage, or vacant ICPs with consumption were identified during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 19(2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

EMS are responsible for HHR data corrections, and compliance was assessed as part of their agent audit report.

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their correction processes since their March 2017 audit and checked all HHR corrections identified.

I reviewed the two HHR corrections processed during the audit period:

- ICP 0419700048LC0FD was set up as a NHH site temporarily, and then corrected back to HHR. I confirmed that it was correctly reported in HHR revision submissions.
- ICP 0343303043LC31B had estimated volumes because no data was provided in September and October 2017 due to a communications fault. Actual data was received on 21/11/2017, and will be included in revision submissions.

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

Error and loss compensation arrangements were discussed with Simply Energy.

Audit commentary

No error or loss compensation arrangements are in place.

Audit outcome

Compliant

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

Simply Energy and EMS process corrections to OPHL's data. Compliance was assessed as part of their agent audits.

Audit commentary

Compliance is recorded in the Simply Energy and EMS agent audit reports. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

9. ESTIMATING AND VALIDATING VOLUME INFORMATION

9.1. Identification of readings (Clause 3(3) Schedule 15.2)

Code reference

Clause 3(3) Schedule 15.2

Code related audit information

All estimated readings and permanent estimates must be clearly identified as an estimate at source and in any exchange of metering data or volume information between participants.

Audit observation

Simply Energy is responsible for the correct identification of readings. Compliance was assessed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

ICP 0002995060CN7C2 is read by the customer, as site health and safety issues prevent the meter reader from accessing the meter. These reads are treated as actual by the reconciliation process, and this is recorded as non-compliance in **section 6.6**.

Audit outcome

Compliant

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

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

Simply Energy is responsible for ensuring that volumes are derived based on meter readings. Compliance was assessed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

Review of submission data in **section 12** confirmed that it is based on readings as required by this clause.

Audit outcome

Compliant

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

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

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

Audit observation

OPHL's agents and MEPs are responsible for the collection meter data. Rounding and truncation were reviewed as part of their agent and MEP audits.

- HHR information is collected by AMS, EMS, and EDML as agents.
- AMI information is provided by AMS, Arc Innovations, FCLM, Metrix, and WEL Networks as MEPs.
- NHH information is provided by Datacol, Delta (up to 30/09/2017), and Wells (from 01/11/2017) as agents.

Audit commentary

OPHL's MEPs and agents retain raw, unrounded data.

Compliance with this clause has been demonstrated by OPHL's agents and MEPs as part of their audits. Because EMS' audit report is more than seven months old, I confirmed that there have been no changes to their processes since their March 2017 audit.

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

HHR estimates are created by EMS, and compliance was assessed as part of their agent audit.

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their estimation processes since their March 2017 audit.

Two estimates of missing data that were later replaced with actual data were provided; both estimates were within $\pm 10\%$ of the actual data. Reasonable endeavours were used to create the estimates.

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 zero values.

Audit observation

Simply Energy is responsible for validating NHH metering data. Compliance was assessed as part of their agent audit.

Audit commentary

Compliance is recorded in Simply Energy's agent audit report.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

HHR data is validated by EMS, and compliance was assessed as part of their agent audit report.

NHH data is validated by Simply Energy, and compliance was assessed as part of their agent audit report.

Audit commentary

Compliance is recorded in EMS’ agent audit report for HHR data validation. Because EMS’ audit report is more than seven months old, I confirmed that that there have been no changes to their processes since their March 2017 audit.

Simply Energy’s agent audit report recorded non-compliance because event logs were not being routinely managed for all AMI installations. Improvements have been made since this audit; event log information is now adequately monitored for AMS and Smartco, as well as Metrix, WEL Networks, and FCLM meters. Arc do not provide event logs, but do provide some event information via email which is reviewed by Simply Energy.

Non-compliance	Description		
Audit Ref: 9.6 With: Clause 17 Schedule 15.2 From: entire audit period	AMI event logs are not monitored for Arc meters. Potential impact: Medium Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong, as emailed information is reviewed and event logs for other MEPs are reviewed. The other validations in place are comprehensive and are likely to identify any consumption related issues, therefore the potential impact on settlement is minor and the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Simply Energy has spoken to Arc and they currently don’t have AMI Event Logs. There is no indication from Arc as to when a report will be written.		30/11/2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
No further action can be taken at this time			

Audit outcome

Non-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

OPHL does not have responsibility for provision of information under clause 13.136.

Audit commentary

Not applicable

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

OPHL does not have responsibility for provision of information under clause 13.137.

Audit commentary

Not applicable

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

OPHL does not have responsibility for provision of information under clause 13.138.

Audit commentary

Not applicable

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

OPHL does not have responsibility for provision of information under clause 13.140.

Audit commentary

Not applicable

Audit outcome

Not applicable

11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

11.1. Buying and selling notifications (Clause 15.3)

Code reference

Clause 15.3

Code related audit information

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

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

Audit observation

The registry list with history for 01/11/2016 to 07/11/2017 was reviewed to determine compliance.

Audit commentary

OPHL has only applied the HHR, RPS, UML, EG1, and PV1 profiles during the audit period. No trading notifications were required.

Audit outcome

Compliant

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

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

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

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

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

Audit observation

ICP days are calculated and reported by EMS. Compliance was assessed as part of their agent audit report.

I reviewed variances for 18 months of GR100 ICP days comparison reports, and investigated any large discrepancies.

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

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

The report noted that EMS do not review the ICP comparison (GR100) return files. The following table shows the ICP days difference between OPHL files and the RM return file (GR100) for all available revisions for 18 months. The differences are small, and generally appear to be decreasing over time.

Month	Ri	R1	R3	R7	R14
Mar 2016	0.10%	0.00%	0.15%	-0.12%	0.02%
Apr 2016	1.59%	0.53%	0.21%	-0.21%	-0.13%
May 2016	0.77%	0.71%	-0.39%	-0.26%	-0.13%
Jun 2016	0.78%	0.67%	-0.21%	-0.13%	-0.13%
Jul 2016	1.25%	-0.36%	-0.25%	-0.12%	-0.25%
Aug 2016	-0.30%	-0.32%	-0.20%	-0.31%	-0.23%
Sep 2016	-0.09%	0.13%	-0.36%	-0.25%	-
Oct 2016	0.40%	-0.12%	-0.12%	-0.01%	-
Nov 2016	0.23%	0.24%	0.09%	-0.09%	-
Dec 2016	0.08%	0.07%	-0.05%	0.00%	-
Jan 2017	0.05%	0.12%	-0.05%	-0.10%	-
Feb 2017	-0.23%	-0.10%	-0.02%	-0.21%	-
Mar 2017	0.22%	0.00%	-0.20%	-0.20%	-
Apr 2017	0.24%	0.31%	0.00%	-	-
May 2017	-0.05%	-0.04%	-0.16%	-	-
Jun 2017	0.04%	-0.03%	-0.08%	-	-
Jul 2017	0.21%	0.05%	-0.07%	-	-

Month	Ri	R1	R3	R7	R14
Aug 2017	-0.02%	-0.01%	-	-	-

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

Audit outcome

Compliant

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

Code reference

Clause 15.7

Code related audit information

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

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

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

Audit observation

Electricity supplied information is reported by Simply Energy, and compliance was assessed as part of their agent audit.

GR130 reports for January 2015 to August 2017 were reviewed to confirm whether the relationship between billed and submitted data appears reasonable. Simply Energy's own checks of AV120 accuracy were reviewed.

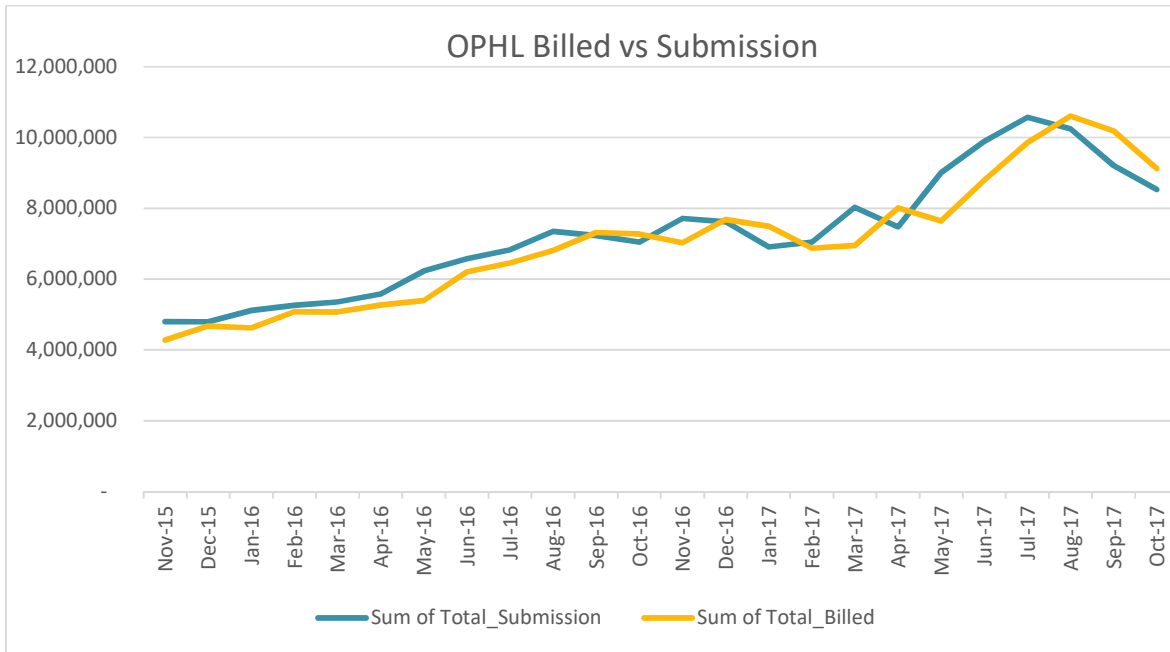
Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late.

Audit commentary

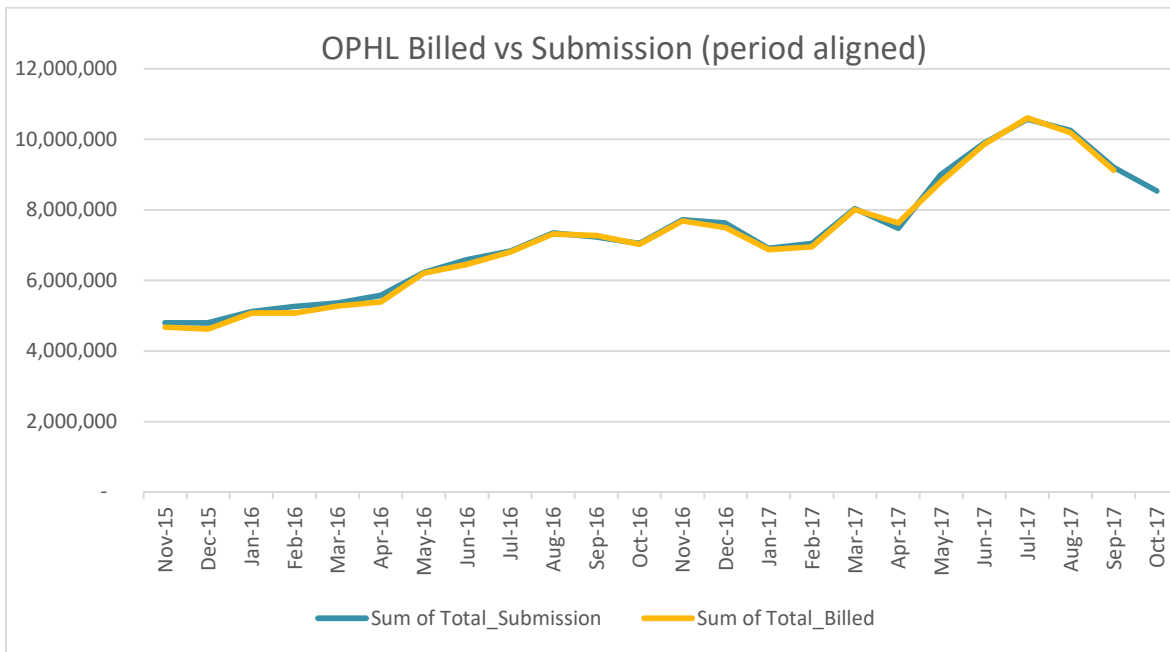
Non-compliance was recorded in the Simply Energy report in relation to another code.

I checked the difference between submission and electricity supplied information for a 24 month period. The relationship between billed and submitted data is becoming closer over time, and appears to primarily relate to timing. When the period billed and submitted data relate to is aligned (e.g. the September submission data is matched with October billing data), I found that the billed and submitted data was very close.

The GR130 results are shown below:



The GR130 results with the submission and billing period aligned is shown below:



Billed versus submission comparison (where the result is negative submission is higher than billed)

Period	GR-130 billed versus submitted difference	GR-130 billed versus submitted difference, with months aligned
Year ended Sep 2017	-2.4%	-0.5%
Two years ended Sep 2017	-4.2%	-0.9%

Breach information provided by the Electricity Authority did not identify any late billed data submissions.

The non-compliance recorded in the January 2017 audit report has been cleared. I confirmed that Simply Energy is monitoring and investigating variances between billed and submitted data monthly.

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

EMS profile HHR aggregates submissions as OPHL's agent. Compliance was assessed as part of their agent audit report.

The GR090 ICP Missing files were examined for September 2016 to August 2017. All differences were reviewed.

HHR aggregates and volumes submissions were compared for revisions zero to seven for September, October and November 2017. Differences between the revision files were compared.

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

Audit commentary

Because EMS' audit report is more than seven months old, I confirmed that there have been no changes to their processes since their March 2017 audit.

The GR090 (HHR ICPs missing) reports for OPHL for September 2016 to August 2017 were checked. Six ICPs had temporary discrepancies between the aggregates submissions and registry records. All the differences related to backdated switches or switch withdrawals, or corrections of registry submission type information.

Comparison of HHR volume and aggregates submissions confirmed that the HHR aggregates consumption was consistent with the X flow volumes in the HHR volumes submission, with very small rounding differences. I flow is not included in the aggregates file, and the Electricity Authority confirmed that this was acceptable during EMS' audit.

Comparison between the revisions for September, October and November 2017 showed some small differences between the initial and one month, and one and three month revisions as estimated data was replaced by actual. There were no differences between the three and seven month revisions.

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

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

Non-compliance	Description				
Audit Ref: 11.4 With: Clause 15.8 From: entire audit period	HHR aggregates file does not contain electricity supplied information. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Strong Breach risk rating: 1				
Audit risk rating	Rationale for audit risk rating				
Low	Controls are rated as strong, and the impact as low, because the requirement to report electricity supplied information is an error in the code, and EMS is providing submission information as expected. In most cases, billed volumes would match reported volumes.				
Actions taken to resolve the issue	Completion date	Remedial action status			
Simply Energy is working with other Traders and the EA to change the Code on this clause as HHR Aggregates information is not derived from electricity supplied information	30 April 2018	Identified			
Preventative actions taken to ensure no further issues will occur	Completion date				
No further action required					

Audit outcome

Non-compliant

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

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

Audit observation

EMS are responsible for daylight savings adjustments as OPHL's agent. Compliance was assessed as part of EMS' agent audit.

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

12.2. Creation of submission information (Clause 15.4)

Code reference

Clause 15.4

Code related audit information

By 1600 hours on the 4th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all NSPs for which the reconciliation participant is recorded in the registry as having traded electricity during the consumption period immediately before that reconciliation period (in accordance with Schedule 15.3).

By 1600 hours on the 13th business day of each reconciliation period, the reconciliation participant must deliver submission information to the reconciliation manager for all points of connection for which the reconciliation participant is recorded in the registry as having traded electricity during any consumption period being reconciled in accordance with clauses 15.27 and 15.28, and in respect of which it has obtained revised submission information (in accordance with Schedule 15.3).

Audit observation

Submissions are created by EMS as OPHL's agent. Compliance was assessed as part of EMS' agent audit.

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

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

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

Audit outcome

Compliant

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

Submissions are created by EMS as OPHL's agent. Compliance was assessed as part of EMS' agent audit.

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

The GR170 and AV080 files for ten submissions were compared, to confirm zeroing occurs.

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Comparison of the GR170 and AV080 files for ten submissions confirmed that zeroing occurs.

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

The registry list as at 08/11/2017 was examined.

Audit commentary

Review of the registry list confirmed that OPHL is not a grid owner.

Audit outcome

Not applicable

12.5. Provision of NSP submission information (Clause 15.10)

Code reference

Clause 15.10

Code related audit information

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

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

Audit observation

The registry list as at 08/11/2017 was examined.

Audit commentary

Review of the registry list confirmed that OPHL is not a local or 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

Review of the Network Supply Points table.

Audit commentary

Review of the Network Supply Points table confirmed that OPHL is not responsible for any points of connection.

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

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

Audit observation

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

Audit commentary

Review of alleged breaches confirmed that no reconciliation submissions were made late.

Corrections were processed, and up to date submission information was provided as required.

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

Simply Energy is responsible for meter read attainment and identification of readings. Compliance was assessed as part of their agent audit.

The 14 month revisions for February 2016 to August 2016 were reviewed to determine whether forward estimate remained.

Audit commentary

Simply Energy's agent audit found that there is not a process in place to create permanent estimates by revision 14. Simply Energy focusses on trying to obtain an actual read before revision 14 where possible.

Some forward estimate exists for all the submissions reviewed, because:

- actual reads were not attained for some ICPs
- some unmetered historic estimate is incorrectly identified as forward estimate because shape files are not available; and
- the January 2017 non-compliance relating to forward estimate caused by missing start reads has been cleared for the July 2016 revision 14 onwards, but still exists for earlier revisions checked. Simply Energy confirmed that missing start reads have been provided to EMS, and historic estimate is monitored at each revision to identify missing start reads.

The existence of forward estimate in the 14 month revision is recorded as non-compliance below. The labelling of forward and historic estimate is discussed further in **section 12.10**.

Non-compliance	Description		
Audit Ref: 12.8 With: Clause 4 Schedule 15.2 From: entire audit period	Some estimated readings are not replaced with permanent estimates by revision 14. Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate. While there is no process to enter forward estimates, there are good controls over read attainment. The risk rating is low. The forward estimate amount was 315,150 kWh across the six 14 month revisions reviewed.		
Actions taken to resolve the issue		Completion date	Remedial action status
Simply Energy has been working with Opunake on reducing the number of sites not read over a period of four months. No read event reports are sent twice per month.		30/11/2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Continued monitoring of no read events and converting legacy meters to Advanced Meters to reduce risk of sites with no reads.		30/06/2018	

Audit outcome

Non-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 no- half hour submission information a reconciliation participant must only use information that is dependent on a control device if (clause 2(2)):*
 - a) *the certification of the control device is recorded in the registry; or*
 - b) *the metering installation in which the control device is location has interim certification.*
- *to create submission information for a point of connection the reconciliation participant must apply to the raw meter data (clause 2(3)):*
 - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(3)(a))*
 - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report (clause 2(3)(b)).*

Audit observation

Submissions are prepared by EMS as OPHL's agent, based on information provided by Simply Energy. Compliance was assessed as part of their agent audits.

Audit commentary

Compliance is recorded in EMS' agent audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

The Simply Energy report records compliance with clause 2 of schedule 15.3 because the files contain the relevant information.

The January 2017 audit found some non-compliance in relation to submissions, this was followed up during the audit.

2016 Findings	2017 Findings
<p>Some ICPs do not have a start read provided by Simply Energy, so the period between the ICP start date and the first reading date is estimated based on the first read to read period. This consumption remains as FE even at the 14 month point.</p>	<p>Cleared.</p> <p>Simply Energy have provided the missing start reads for July 2016 onwards. Historic estimate is monitored at each revision to identify missing start reads.</p> <p>Changes have been made to ensure that start reads are provided consistently, and review of a sample of historic estimates confirmed that start reads were correct.</p>
<p>Madras does not differentiate between meter readings for continuous ICPs and meter readings for newly acquired ICPs, meaning that all meter readings are made effective at the end of the day. This results in the shape file being applied from the second day of ownership for new ICPs. The total consumption is correct but the apportionment between months is incorrect.</p>	<p>Still existing.</p>
<p>If an ICP starts on a given date, and there are readings in Madras prior to that date (presumably entered in error, although this could not be determined), then Madras uses those readings to calculate HE for the Active period. Madras should ignore all readings prior to the start date for ICPs.</p>	<p>Cleared.</p> <p>EMS has confirmed that reads entered prior to the start date are ignored. No ICPs with reads recorded prior to the start date were identified.</p>
<p>If there is a reading on the last day of the previous month (for a continuous ICP) and the last day of the current month, Madras should calculate "Actual" consumption, without any HE calculations.</p>	<p>Cleared.</p> <p>Review of historic estimate calculations confirmed that actual consumption is calculated for this scenario.</p>
<p>It appears that changes to the aggregation factors are not being routinely made within Madras, and when changes are made retrospectively, the original row is not "zeroed".</p>	<p>Cleared.</p> <p>Comparison of AV080 and GR170 submissions for ten months confirmed that zeroing is occurring. Aggregation factors were correct for the examples reviewed.</p>
<p>AMI data from FCLM meters is recorded incorrectly for some ICPs for some months. AMI data is collected by EDMI as an agent to FCLM; this data is then provided to FCLM and is allocated to channels within the AMBIT module. There was some incorrect "mapping" set up manually in AMBIT.</p>	<p>Cleared.</p> <p>The mapping issues were resolved as soon as the errors were identified. Data was corrected and washed up.</p>

A further non-compliance was identified during Simply Energy's 2017 audit:

Simply Energy 2017 Findings	OPHL 2017 Findings
<p>For ICPs with multiple reads during the month (mostly AMI), Madras will calculate the month in two parts. The first part is the first day of the month, which is labelled as "FSE" (forward standard estimate) even though it's calculated from actual readings. The rest of the month is labelled HE. The revision process re-labels the first day as HE.</p>	<p>Still existing. This issue relates to labelling of historic estimate as forward estimate where profile information is unavailable, and is discussed further in section 12.10.</p>
<p>Madras does not have the capability to deal with unmetered load, so Simply Energy has "dummy" meters set up for all of these ICPs and they calculate and enter a "read" each month. These "reads" have not been sent for some months, so Madras has calculated FSE based on previous unmetered quantities. The calculation is correct, but it is not labelled correctly because it should be HE.</p>	<p>Does not affect OPHL. The unsent reads affected Simply Energy only.</p>

The reporting issues still existing are recorded as non-compliance below.

Non-compliance	Description
<p>Audit Ref: 12.9 With: Clause 2 Schedule 15.3 From: entire audit period</p>	<p>Some minor issues have resulted in:</p> <ul style="list-style-type: none"> • incorrect labelling of forward and historic estimate • incorrect apportionment of consumption between months where an ICP has a start date within the month. <p>Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Moderate Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
<p>Low</p>	<p>Controls are rated as moderate, as they are sufficient to ensure correct reporting most of the time. The impact is low, because all consumption is reported, the non-compliance relates only to labelling of forward and historic estimate, and apportionment of NHH consumption between months where a new connection or switch in has occurred.</p>

Actions taken to resolve the issue	Completion date	Remedial action status	
Simply Energy does not believe there is any action here as there is no effect on overall consumption.	14/12/2017	Disputed	
Preventative actions taken to ensure no further issues will occur	Completion date		
No action required			

Audit outcome

Non-compliant

12.10. Historical estimates and forward estimates (Clause 3 Schedule 15.3)

Code reference

Clause 3 Schedule 15.3

Code related audit information

For each ICP that has a non-half hour metering installation, volume information derived from validated meter readings, estimated readings, or permanent estimates must be allocated to consumption periods using the following techniques to create historical estimates and forward estimates (clause 3(1)).

Each estimate that is a forward estimate or a historical estimate must clearly be identified as such (clause 3(2)).

If validated meter readings are not available for the purpose of clauses 4 and 5, permanent estimates may be used in place of validated meter readings (clause 3(3)).

Audit observation

I reviewed 12 AV080 submissions for revisions 3 to 14, to confirm that historic estimates are included and identified.

Permanence of meter readings is reviewed in **section 12.8**. The methodology to create forward estimates is reviewed in **section 12.11**.

Audit commentary

Review of 12 AV080 submissions confirmed that historic estimate is present and labelled.

Some issues with the labelling of forward and historic estimate were identified:

- Consumption is labelled as forward estimate until shape files are published by the reconciliation manager for the entire read period. The only exceptions are where consumption falls between two actual reads recorded in the same month, or between the last day of the previous month and a day in the month being reported; this consumption is actual not profiled, and is correctly recorded as historic estimate. Forward and historic estimates are correctly labelled for revision submissions, which are produced after the reconciliation manager’s shape files are published.
- Unmetered load has the UNM profile applied. No shape values for the UNM profile are published by the reconciliation manager. Although the historic estimate is correctly calculated, it is labelled as forward estimate because no shape files are available.

- ICP 0002995060CN7C2 is read by the customer, but the readings are recorded and treated as actual for reconciliation purposes. Consumption for this ICP is labelled as historic estimate, but consumption based on customer reads should be recorded as forward estimate.

Non-compliance	Description		
Audit Ref: 12.10 With: Clause 3 Schedule 15.3 From: entire audit period	Historic estimate is labelled as forward estimate where reconciliation manager published shape files are unavailable for the entire read period. Classification of customer reads as actual for ICP 0002995060CN7C2 results in historic estimate being recorded where forward estimate should be recorded. 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 rated as moderate, as historic estimate will be correctly classified in most cases. For revision submissions, metered volumes will be correctly classified as shape files are available. The audit risk rating is low, because the consumption calculated is correct. For all scenarios except ICP 0002995060CN7C2 and unmetered load, forward and historic estimate will be correctly labelled for revision submissions.		
Actions taken to resolve the issue		Completion date	Remedial action status
The Madras system was built always expecting a profile shape file to be provided for all profiles. So for the UML issue this would require a significant change in code. The volumes associated with UML are so small and this is only a reporting issue not consumption issue therefore we see no action to take.		14/12/2017	Disputed
Preventative actions taken to ensure no further issues will occur		Completion date	
No further action		14/12/2017	

Audit outcome

Non-compliant

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

EMS are responsible for calculating historic estimate as OPHL's agent.

To assist with determining compliance of the Historical Estimate (HE) processes, OPHL were supplied with a list of scenarios, and for some individual ICPs a manual HE calculation was conducted, and compared to the result from Madras.

Audit commentary

I found that where examples were provided, the historic estimate calculations were accurate.

Non-compliance is recorded for the customer read scenario (m), because an input into the calculation was incorrect for the example provided. Customer reads were entered and treated as actual for ICP 0002995060CN7C2, although the checks required by clause 5 of Schedule 15.2 were not completed. This is recorded as non-compliance in **section 6.5** and below.

Non-compliance is recorded for switch in scenario (d), because Madras does not differentiate between meter readings for continuous ICPs and meter readings for newly acquired ICPs, meaning that all meter readings are made effective at the end of the day. This results in the shape file being applied from the second day of ownership for new ICPs. The total consumption is correct but the apportionment between months is incorrect.

Historic estimate is labelled as forward estimate where shape files are unavailable. Non-compliance is recorded in **section 12.10**.

Test	Scenario	Test Expectation	Result
a	ICP becomes Active part way through a month	Consumption is only calculated for the Active portion of the month.	Compliant
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Compliant
c	ICP become Inactive then Active again within a month.	Consumption is only calculated for the Active portion of the month.	Has not occurred
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Not compliant

Test	Scenario	Test Expectation	Result
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Has not occurred
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day.	Compliant
h	Continuous ICP without a read during the month	Consumption is calculated assuming the readings are valid until the end of the day.	Compliant
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Compliant
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Compliant
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Compliant
l	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Compliant
m	ICP with a customer read during the month	Customer reads are not used to calculate historic estimate.	Not compliant
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate.	Has not occurred
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly.	Compliant

Non-compliance	Description		
Audit Ref: 12.11 With: Clause 4 and 5 Schedule 15.3 From: entire audit period	Customer readings for ICP 0002995060CN7C2 were treated as actual readings when calculating historic estimate. Madras treats readings as though they occur at the end of the day, resulting in incorrect apportionment of some consumption between months for switch ins and new connections. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate, as they are sufficient to ensure correct reporting most of the time. The impact is low, because all consumption is reported, the non-compliance relates only to labelling of forward and historic estimate, and apportionment of NHH consumption between months where a new connection or switch in has occurred.		
Actions taken to resolve the issue		Completion date	Remedial action status
Simply Energy will review with EMS the reporting as we'd previously had this issue under Simply Energy's audit and believed it was resolved.		28/02/2018	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Currently under investigation.		28/02/2018	

Audit outcome

Non-compliant

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 Schedule 15.3

Code related audit information

Forward estimates may be used only in respect of any period for which an historical estimate cannot be calculated.

The methodology used for calculating a forward estimate may be determined by the reconciliation participant, only if it ensures that the accuracy is within the percentage of error specified by the Authority.

Audit observation

EMS are responsible for calculating historic estimate as OPHL's agent.

Forward estimates were checked for accuracy by analysing the GR170 file for variances between revisions for ten months.

Audit commentary

EMS' forward standard estimate process is based on a "straight line" methodology, and where no historical information is available a "forward default" estimate of 20 units per day is used. The process for forward standard estimate calculation was checked and confirmed as accurate.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within 15% and within 100,000kWh.

The table below shows that this target was not met for May 2017 for one balancing area. The difference was caused by a metering issue for one ICP, the switch in read contained five digits, but reads received from the MEP contained six digits. The switch read has been corrected using the RR process. The difference is recorded as non-compliance in the table below.

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

Month	Revision 1	Revision 3	Revision 7/8	Revision 14	Total Balancing Areas
Apr 2016	0	0	0	0	70
May 2016	0	0	0	0	72
Jun 2016	0	0	0	0	71
Jul 2016	0	0	0	0	72
Aug 2016	0	0	0	-	75
Sep 2016	0	0	0	-	77
Oct 2016	0	0	0	-	78
Feb 2017	0	0	0	-	90
Mar 2017	0	0	-	-	93
May 2017	1	1	-	-	93

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

Month	Revision 1	Revision 3	Revision 7/8	Revision 14
Apr 2016	-2.32%	-2.11%	-4.35%	-4.78%
May 2016	2.21%	-4.67%	-5.45%	-5.83%
Jun 2016	-2.83%	-7.84%	-8.58%	-8.78%
Jul 2016	-1.34%	-2.58%	-3.26%	-3.61%
Aug 2016	-1.14%	-2.84%	-4.12%	-
Sep 2016	0.34%	-1.41%	-2.30%	-
Oct 2016	0.50%	-1.31%	-1.31%	-
Feb 2017	0.05%	0.05%	-2.08%	-
Mar 2017	-1.21%	-1.62%	-	-
May 2017	-3.56%	-5.77%	-	-

Non-compliance	Description		
Audit Ref: 12.12 With: Clause 6 Schedule 15.3 From: 01-May-17 To: 31-May-17	The accuracy threshold was not met for one month. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong, as they are sufficient to ensure data is within the accuracy threshold most of the time. The only breach was caused by another participant providing incorrect data. Initial data is replaced with revised data, and washed up.		
Actions taken to resolve the issue		Completion date	Remedial action status
Issue identified but after volume had been reported, no further action is warranted we believe in this situation.		14/12/2017	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
No further action	14/12/2017	

Audit outcome

Non-compliant

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

Code reference

Clause 7 Schedule 15.3

Code related audit information

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

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

Audit observation

In the event of a profile change, Simply Energy supplies EMS with a validated meter reading or a permanent estimate on the day that the change is effective. Compliance was assessed as part of Simply Energy’s agent audit.

The registry list with history for 01/11/2016 to 07/11/2017 was reviewed to identify all ICPs which have had a profile change during the audit period.

Audit commentary

Compliance is recorded in Simply Energy’s agent audit report.

Review of the registry list identified four ICPs with profile changes during the period. All had actual reads recorded on the day of the profile change.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

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

EMS provides submissions to the reconciliation manager, as OPHL's agent. Compliance was assessed as part of their agent audit.

Audit commentary

EMS has achieved compliance with the requirement to aggregate submissions correctly. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Non-compliance was recorded in EMS' report for late provision of two submissions, but review of OPHL's breach report from the Electricity Authority confirmed that they were unaffected by this issue.

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

EMS provides submissions to the reconciliation manager, as OPHL's agent. Compliance was assessed as part of their agent audit.

Audit commentary

Compliance is recorded in EMS' audit report. Because EMS' audit was more than seven months ago, I confirmed that there have been no changes to their processes since their March 2017 audit.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

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

I reviewed 12 AV080 reports to determine whether historic estimate requirements were met.

Audit commentary

The quantity of historical estimates is contained in the submission file and is not a separate report.

The table below shows that the historic estimate threshold was not met for all NSPs for each of the submissions reviewed.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Feb 2016			88	109
Mar 2016			89	110
Apr 2016			92	118
Jun 2016		112	100	121
Jul 2016		112	114	122
Aug 2016		116	117	124

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Apr 2017	134			142
May 2017	141			143
Jun 2017	141			143

The table below shows that the percentage HE at a summary level for all NSPs is well above the required targets for the three and seven month revisions, but below the required targets for the 14 month revisions. Forward estimate remains primarily due to ICPs without actual readings, incorrect classification of historic estimate where shape values are not available, and ICPs with missing start reads prior to the July 2016 14 month revision. The reasons forward estimate remains are discussed further in **section 12.8**.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Feb 2016	-	-	96.3%
Mar 2016	-	-	96.9%
Apr 2016	-	-	97.2%
Jun 2016	-	97.9%	98.3%
Jul 2016	-	98.2%	99.9%
Aug 2016	-	97.8%	99.9%
Apr 2017	96.9%	-	-
May 2017	98.4%	-	-
Jun 2017	99.4%	-	-

Non-compliance	Description		
<p>Audit Ref: 13.3</p> <p>With: Clause 10 Schedule 15.3</p> <p>From: entire audit period</p>	<p>Historic estimate thresholds were not met for some revisions.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>Controls are rated as moderate, as they are sufficient to mitigate the risk of not meeting the threshold most of the time. I note that actual historic estimate will be slightly higher than the levels reported because of the incorrect classification of unmetered historic estimate as forward estimate.</p> <p>The audit risk rating is low, as OPHL was close to the target in all cases.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Maintaining focus on sites without reads for period of 3 to 4 months to ensure 100% threshold is obtain in 12 months.</p>		<p>31/03/2018</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Advanced meters to be installed to assist in sites with hard to get reads.</p>		<p>30/06/2018</p>	

Audit outcome

Non-compliant

CONCLUSION

OPHL's compliance is reliant on the compliance of their agents:

HHR Agents	NHH Agents
Simply Energy	Simply Energy
EMS	EMS
EDMI	Datacol
AMS	Delta <i>until 30/09/2017</i> Wells <i>from 01/11/2017</i>

Compliance has improved since the previous audit, notably:

- all recommendations made in the previous audit have been implemented and cleared
- issues relating to as billed submissions have been resolved, and the relationship between as billed and submitted data is now close
- a high level of compliance was achieved for switching processes, except AN file content
- registry validation processes are robust.

There have been improvements to reconciliation processes, with some previous non-compliances cleared, and corrected data provided through the revision process. Some issues remain, primarily in relation to the classification and calculation of historic estimate, and use of permanent estimates.

This audit found 17 non-compliances, and I note several of these stemmed from the issues with classification of historic estimate. No recommendations or issues were raised. The matters identified are shown in the tables below.

The next audit frequency table indicates that the next audit be due in 12 months, and I agree with this recommendation.

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	0000536719NR293 was temporarily recorded with unmetered load and trader unmetered details on the registry when no unmetered load was connected.	Strong	Low	1	Cleared. The registry has been updated.
Assignment of contracts by the Authority	2.8	11.15B	OPHL's Contract with Customers For Delivered Electricity does not specifically cover assignment by the Electricity Authority in the event of trader default.	Moderate	Low	2	Identified
Changes to registry information	3.3	10 Schedule 11.1	The registry was not updated within five business days for some status and MEP nomination events.	Moderate	Low	2	Identified
Provision of registry information	3.5	9 Schedule 11.1	Two ICPs were updated to active status more than five business days after the event.	Moderate	Low	2	Identified
Losing trader response to standard switch request	4.2	3 and 4 Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for 178 ICPs with advanced meters.	Weak	Low	3	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Losing trader response to switch move request	4.8	10(1) Schedule 11.3	The AA (accept and acknowledge) AN response code was applied for two ICPs with advanced meters. One AN had backdated proposed switch date.	Weak	Low	3	Identified
Switch withdrawals	4.15	17 and 18 Schedule 11.3	One AW was issued two business days late.	Strong	Low	1	Identified, strong controls are already in place
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	Datacol do not conduct checks for phase failure. Meter condition checks are not completed for customer read ICP 0002995060CN7C2.	Strong	Low	1	Identified
Reads during the period of supply	6.8	7(1) and (2) Schedule 15.2	Eight ICPs did not have an actual read recorded during the period of supply.	Moderate	Low	2	Identified
Meter event reporting	9.6	17 Schedule 15.2	AMI event logs are not monitored for Arc meters.	Strong	Low	1	Identified
HHR aggregates	11.4	15.8	HHR aggregates file does not contain electricity supplied information.	Strong	Low	1	Identified
Permanent estimates	12.8	4 Schedule 15.2	Some estimated readings are not replaced with permanent estimates by revision 14.	Moderate	Low	2	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Submission preparation	12.9	2 Schedule 15.3	Some minor issues have resulted in: <ul style="list-style-type: none"> incorrect labelling of forward and historic estimate. incorrect apportionment of consumption between months where an ICP has a start date within the month. 	Moderate	Low	2	Disputed
Historic and forward estimate	12.10	3 Schedule 15.3	Historic estimate is labelled as forward estimate where reconciliation manager published shape files are unavailable for the entire read period. Classification of customer reads as actual for ICP 0002995060CN7C2 results in historic estimate being recorded where forward estimate should be recorded.	Moderate	Low	2	Disputed
Historic estimate process	12.11	4 and 5 Schedule 15.3	Customer readings for ICP 0002995060CN7C2 were treated as actual readings when calculating historic estimate. Madras treats readings as though they occur at the end of the day, resulting incorrect apportionment of some consumption between months for switch ins and new connections.	Moderate	Low	2	Investigating

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Forward estimate	12.12	6 Schedule 15.3	The accuracy threshold was not met for one month.	Strong	Low	1	Identified
Historic estimate reporting	13.3	10 Schedule 15.3	Historic estimate thresholds were not met for some revisions.	Moderate	Low	2	Identified
Future Risk Rating						30	

Future Risk Rating	0	1-3	4-15	16-40	41-55	55+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Description	Recommendation
		Nil	

ISSUES

Subject	Section	Description	Issue
		Nil	

PARTICIPANT RESPONSE

OPHL and Simply Energy have reviewed this report, and their comments are contained within its body.