

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT

The Veritek logo consists of the word "VERITEK" in a blue, serif, all-caps font. To the left of the text is a thin vertical blue line. Below the text is a thin horizontal blue line.

For

WISE PRE PAY ENERGY LIMITED

Prepared by: Tara Gannon, Veritek Limited

Date audit commenced: 30 January 2018

Date audit report completed: 12 February 2018

Audit report due date: 23 February 2018

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EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **Wise Pre Pay Energy Ltd (WISE)**, 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.

WISE Pre Pay Energy Limited (WISE) are a solely pre-payment participant. WISE have made considerable effort to improve their processes since the 2017 audit.

In most cases, the meter readings used in the switching process are validated meter readings or permanent estimates. Some issues with switch reads remain, and most of the non-compliances raised in the audit relate to this. I found that in certain circumstances, the reads applied in CS and RR files were not consistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date.

- When WISE receives an NT request, they contact their customer to determine whether they wish to use up any credit they have with WISE, or to receive a refund and pay for energy after the NT date with their new retailer. If they choose to use their credit, the switch is processed correctly. If they wish to receive a refund and be billed for consumption by their new retailer, WISE enters estimated readings of zero between the NT receipt date and switch out date. This can result in an incorrect switch read if the switch event date is after the NT receipt date.
- Where a vacant ICP is requested, WISE switches the ICP on the last actual reading for the last customer supplied at the address. WISE normally disconnects for vacancy promptly on the day the ICP becomes vacant, so there is usually little if any consumption between this final reading and the switch out reading. Nine switch move CS files reflected the last actual read before the ICP became vacant, rather than the actual reading on the event date. The maximum total difference for the errors identified was 515 kWh.

Application of switch readings has been discussed with WISE, including that the reading must reflect the actual reading or be the best estimate of the reading on the event date, regardless of who the customer wishes to be billed by, or whether WISE has an active customer at the address. The setting of event dates and withdrawal processes should be used to meet the customer's requirements, rather than amending readings.

Corrections also require some improvement. Corrections for bridged meters are still not completed, but I saw evidence of other corrections being processed. Bridging occurs rarely, as almost all reconnections are remote.

Many improvements have been made since the 2017 audit, and all recommendations have been implemented:

- there has been an improvement in the timeliness of registry updates.
- audit trails are now compliant
- estimated readings are replaced with actual readings if they become available later
- the ICP days report has been corrected, and now excludes inactive days
- all reconciliation submissions have been on time
- inactive consumption is identified and reported
- historic estimate calculation issues are resolved
- WISE now only supplies one non AMI meter, which is in the process of being upgraded to AMI.

The audit found 20 non-compliances. The breach risk rating total is 48, which gives an indicative next audit due date of six months.

WISE's comments indicate that they will act to prevent recurrence of the non-compliances identified during the audit. WISE understands they must to comply with the code, even if it results in costs being

incurred which cannot be recovered from the customer. Improvements have been made between the time of the audit and the report being finalised, which are expected to dramatically improve WISE's compliance for switching.

Taking this into account, I recommend that the next audit should be carried out in 10 months, to allow time for the changes to be implanted and WISE to demonstrate they are consistently operating as intended.

The matters raised are shown in the tables below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	One ICP was not updated to active from the correct date. Ten ICPs were not updated to inactive from the correct date.	Moderate	Low	2	Identified
Changes to registry information	3.3	10 Schedule 11.1	112 late status updates. Four late MEP nominations.	Moderate	Low	2	Identified
Management of “active” status	3.8	17 Schedule 11.1	One ICP was not updated to active from the correct date.	Moderate	Low	2	Identified
Management of “inactive” status	3.9	19 Schedule 11.1	10 ICPs were updated to inactive from the date the customer account was finalised, not the disconnection date. Credit disconnections are only updated to inactive once they have been disconnected for five business days or more.	Weak	Low	3	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	<p>Less than 50% of proposed event dates were within five business days after the NT was received.</p> <p>An incorrect AN response code was applied for one switch.</p>	Weak	Low	3	Identified
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	<p>136 late CS files for transfer switches.</p> <p>If the switch event date is after NT receipt and the customer does not wish to use their credit balance, consumption between the NT date and switch date is estimated as zero, and the switch read is recorded as actual.</p> <p>If an ICP is vacant, the closing read for the last customer is used in the CS.</p> <p>Four CS files with correct readings had estimated readings incorrectly recorded as actual.</p>	Weak	Low	3	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Non-half hour switch event meter reading - standard switch	4.5	6(2) and (3) Schedule 11.3	Two read changes issued under clauses 6(2) and (3) of schedule 11.3 were rejected.	Moderate	Low	2	Investigating
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	An incorrect AN response code was applied for one switch.	Moderate	Low	2	Identified
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	<p>257 late CS files for switch moves.</p> <p>If an ICP is vacant, the closing read for the last customer is used in the CS.</p> <p>If the switch event date is after NT receipt and the customer does not wish to use their credit balance, consumption between the NT date and switch date is estimated as zero, and the switch read is recorded as actual.</p> <p>One CS with correct readings had estimated readings incorrectly recorded as actual.</p>	Weak	Medium	6	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Gaining trader changes to switch meter reading - switch move	4.11	12 Schedule 11.3	An accepted read change was not applied in PEBS. Two read change requests were late. Two ICPs had incorrect read types recorded in RR files, and one ICP had an incorrect read type recorded in PEBS. Two changed reads were recorded against an incorrect date in PEBS.	Moderate	Low	2	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	Three NWs were issued more than two calendar months after the switch event date.	Strong	Low	1	Identified
Metering information	4.16	17 and 18 Schedule 11.3	Readings in nine switch move CS files were inconsistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date.	Weak	Low	3	Identified
Electricity conveyed & notification by embedded generators	6.1	10.13, 10.24 and 15.13	Energy is not metered and quantified according to the code where meters are bridged.	Moderate	Low	2	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Interrogate meters once	6.8	7(1) and (2) Schedule 15.2	Six ICPs did not have an actual read recorded during the period of supply, and exceptional circumstances did not exist.	Moderate	Low	2	Investigating
Correction of NHH meter readings	8.1	19(1) Schedule 15.2	Three bridged meters have not had corrections processed.	Moderate	Low	2	Identified
Identification of readings	9.1	3(3) Schedule 15.2	Read types were incorrectly recorded in 16 switch files.	Weak	Low	3	Identified
NHH metering information data validation	9.5	16 Schedule 15.2	Where a subsequent read is lower than the switch in reading, the negative consumption is zeroed out.	Moderate	Low	2	Investigating
Electronic meter readings and estimated readings	9.6	17 Schedule 15.2	AMI event information not adequately obtained and monitored. Event reporting is received from AMS and WEL Networks, but is not reviewed. Event reporting is not received from Metrix.	Weak	Low	3	Identified
Calculation of ICP days	11.2	15.6	ICP days are not reported correctly where status updates are not processed with the correct date.	Strong	Low	1	Identified

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Accuracy of submission information	12.7	15.12	<p>If permanent estimate readings do not reflect the best estimate of consumption, historic estimate many not be correct.</p> <p>Where status changes are not processed from the correct date, ICP days may not be reported correctly.</p> <p>Historic estimate for consumption while inactive may not be calculated correctly if actual or permanent estimate reads are not recorded on the disconnection and reconnection date.</p>	Moderate	Low	2	Identified
Future Risk Rating						48	

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.

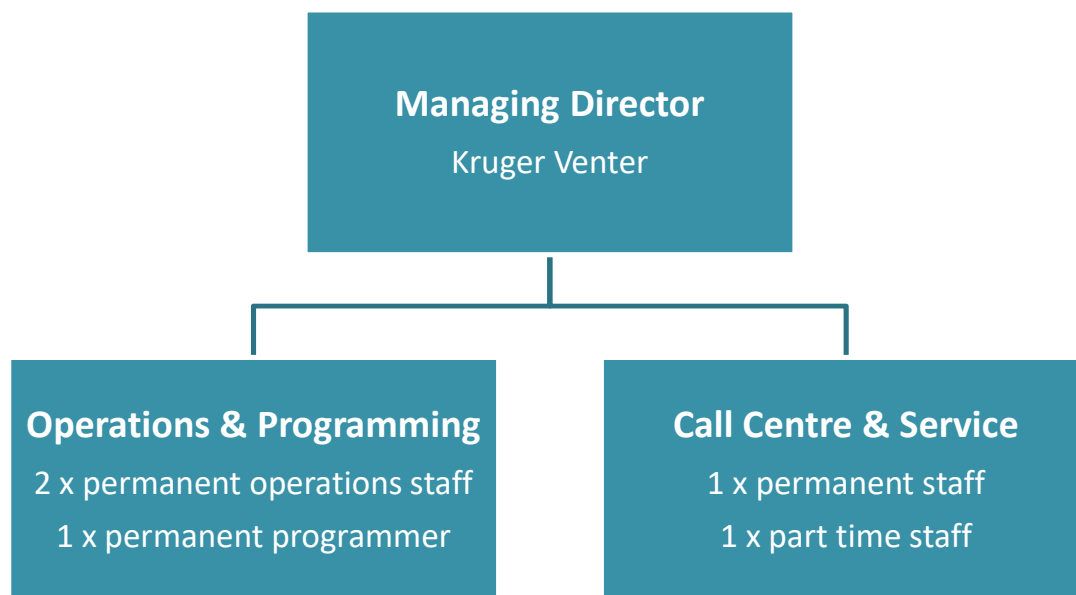
Audit observation

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:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

WISE personnel assisting in this audit were:

Name	Title
Kruger Venter	Managing Director
Ferdin Jayachandran	Metering Operations Analyst
Insoo Kim	Programming & Operations Manager

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

WISE receives AMI data from AMS, Metrix, and WEL Networks as MEPs. There are no agents involved in the process.

Audit commentary

Not applicable

1.5. Hardware and Software

WISE uses the Pre Pay Energy Billing System (PEBS) platform which is owned by Energy Billing System Limited. PEBS is a bespoke MySQL database on a Linux operating system. Daily backups are performed to a remotely hosted server.

1.6. Breaches or Breach Allegations

There was one alleged breach relevant to the scope of the audit during the audit period.

Alleged breach 1705WISE1 related to failure to submit revised submission information to the reconciliation manager by 4pm on the 13th business day in May 2017. The submission was completed in time for the reconciliation manager to re-run the reconciliation and meet the reconciliation deadlines.

The delay occurred due to an error when determining the date of the 13th business day, and steps have been taken to ensure submission due dates are accurately calculated to prevent recurrence.

The committee decided not to act on the alleged breach.

1.7. ICP Data

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

Metering Category	(2018)	(2017)	(2016)
1	1840	2210	1,972
2	-	-	-
3	-	-	-
4	-	-	-
5	-	-	-
9	-	-	-

All ICPs on the list file are summarised in the table below:

Status	Number of ICPs (2018)	Number of ICPs (2017)	Number of ICPs (2016)
Active (2,0)	1,840	2,210	1,972
Inactive – new connection in progress (1,12)	-	-	-
Inactive – electrically disconnected vacant property (1,4)	11	43	58
Inactive – electrically disconnected remotely by AMI meter (1,7)	62	16	9
Inactive – electrically disconnected at pole fuse (1,8)	1	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-	7	1
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)	2	2	-
Inactive – reconciled elsewhere (1,5)	-	-	-
Decommissioned (3)	16	-	-

1.8. Authorisation Received

An authorisation letter was provided.

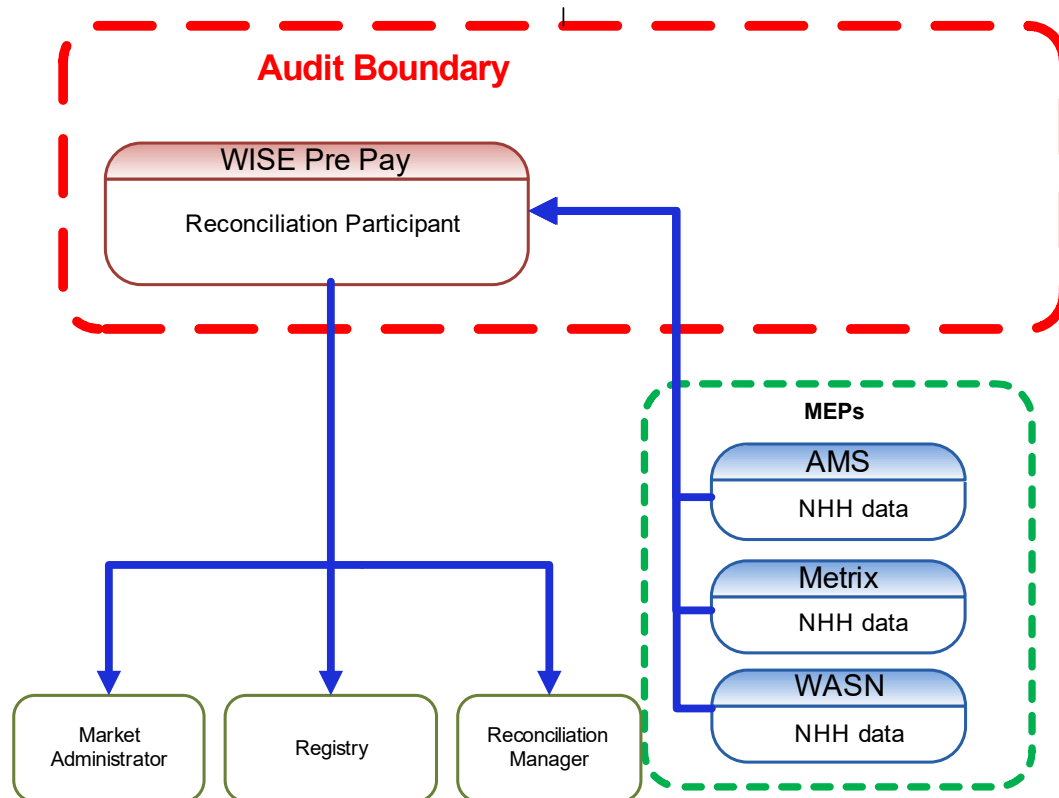
1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of **Wise Pre Pay Energy Ltd (WISE)**, to support their application for renewal of certification in accordance with clauses 5 and 7 of schedule 15.1.

The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits version 7.1.

The audit was carried out at WISE's premises in Auckland on 30 and 31 January 2018.

The scope of the audit is shown in the diagram below, with the WISE audit boundary shown for clarity. WISE are a solely pre-payment participant. At the time of the audit, WISE only supplied one ICP without an AMI capable meter, which is in the process of being upgraded.



The MEPs are audited separately. The table below shows the tasks under clause 15.38 of part 15 for which WISE requires certification. This table lists the MEPs who assist with these tasks:

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs
(a) - Maintaining registry information and performing customer and embedded generator switching		

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs
(b) – Gathering and storing raw meter data		AMS - NHH Metrix - NHH WEL Networks - NHH
(c)(iii) - Creation and management of HHR & NHH volume information		
(d) – Calculation of ICP days		
(da) - delivery of electricity supplied information under clause 15.7		
(e) – Provision of submission information for reconciliation		

1.10. Summary of previous audit

WISE provided a copy of their previous audit conducted in May 2017 by Tara Gannon of Veritek Limited.

The audit found 25 non-compliances and made three recommendations. The summary tables below show the status of the non-compliances and recommendations. Further comment is made in the relevant sections of this report.

Table of non-compliance

Subject	Section	Clause	Non-compliance	Remedial Action
Relevant information	2.1	15.2 of Part 15	Some incorrect information was not identified and corrected as soon as practicable during the audit period.	Still existing, but there a reduction in the number of discrepancies. Refer to section 2.1 .
Audit trails	2.4	21 of Schedule 15.2	The meter reading audit trail within PEBS does not include operator identifier.	Cleared. Refer to section 2.4 .
MEP arrangements	2.12	10.36	WISE supplied ICP 0000371141TUC44 with Trustpower as MEP from 09/02/2017 to 06/04/2017, without having valid MEP arrangements in place. Upon switch in WISE requested AMS replace the meter, and AMS accepted the nomination effective from the switch in date.	Cleared. Refer to section 2.13 .

Subject	Section	Clause	Non-compliance	Remedial Action
Changes to registry information	3.3	10 of Schedule 11.1	<p>243 status updates were not processed within 5 business days of the event on the Registry.</p> <p>One status update applied an incorrect code. Inactive - ready for decommissioning was applied instead of inactive - de-energised remotely by AMI meter.</p>	<p>Still existing, but there has been improvement in the timeliness of registry updates.</p> <p>Refer to section 3.3.</p>
Management of inactive status	3.9	19 of Schedule 11.1	<p>ICPs disconnected for credit reasons are not updated to inactive on the registry, unless they have been inactive for a week or more. The registry should reflect the correct status for each ICP on each day.</p> <p>Some disconnections were not processed in PEBS or on the registry from the correct date.</p>	<p>Still existing.</p> <p>Refer to section 3.9.</p>
AN files for standard switches	4.2	3 of Schedule 11.3	<p>Incorrect AN response codes were provided for two ICPs with AMI metering. AA was applied instead of AD.</p>	<p>Still existing.</p> <p>Refer to section 4.2.</p>
CS files for standard switches	4.3	5 of Schedule 11.3 and Clause 15.2 of Part 15	<p>Incorrect standard switch CS file content including</p> <p>Some incorrect and inaccurate switch readings, due to not using actual reads where they are available and applying zero estimates.</p> <p>Some incorrect read types.</p> <p>One incorrect last read date.</p>	<p>Still existing.</p> <p>Refer to section 4.3.</p>
CS files for standard switches	4.3	Clause 5 of Schedule 11.3	<p>Two late CS files</p>	<p>Still existing.</p> <p>Refer to section 4.3.</p>
AN files for switch moves	4.8	Clause 10 of Schedule 11.3	<p>An incorrect AN response code was provided for one ICP which was de-energised. CO was applied instead of PD.</p>	<p>Still existing.</p> <p>Refer to section 4.8</p>
Losing trader determines a different switch date	4.8	Clause 10 of Schedule 11.3	<p>21 late CS files.</p>	<p>Still existing.</p> <p>Refer to section 4.10.</p>

Subject	Section	Clause	Non-compliance	Remedial Action
Losing trader determines a different switch date	4.9	Clause 10(2) of Schedule 11.3	Switch information was not provided for the event date set by the losing trader for 10 switches.	Still existing. Refer to section 4.10.
CS files for switch moves	4.10	11 of Schedule 11.3 and Clause 15.2 of Part 15	Incorrect switch move CS file content including Some incorrect and inaccurate switch readings, due to not using actual reads where they are available and applying zero estimates. Some incorrect read types. One incorrect last read date.	Still existing. Refer to section 4.10.
Read changes for switch moves	4.11	12 of Schedule 11.3	Three late read change acknowledgement files.	Still existing. Refer to section 4.11.
Read changes for switch moves	4.11	6 and 6A of Schedule 11.3 and 15.2 of Part 15	An accepted read change was not applied in PEBS. This will result in incorrect submission information.	Still existing. Refer to section 4.11.
Defective metering installations	6.4	15.2 of Part 15	Where a meter is found to be bridged, consumption is not estimated for the bridged period.	Still existing. Refer to section 8.1.
Interrogate meters once	6.8	7(1) and 7(2) of Schedule 15.2	Five ICPs with no read gained during the period of supply and exceptional circumstances not met were identified.	Still existing. Refer to section 6.8.
Correction of NHH readings	8.1	19(1) of schedule 15.2 and 15.2 of Part 15	Some meter changes were not processed with the correct date and read.	Still existing. Refer to section 8.1.
Correction of NHH readings	8.1	19(1) of schedule 15.2 and 15.2 of Part 15	Estimated reads are not replaced with actual readings, should actual readings become available at a later date.	Cleared. Refer to section 8.1.

Subject	Section	Clause	Non-compliance	Remedial Action
Correction of NHH readings	8.1	19(1) of schedule 15.2	Consumption on vacant sites is only identified and submitted if there is an active customer for the ICP.	Cleared. Refer to section 8.1.
ICP days calculation	11.2	15.6 and 15.2 of Part 15 and	The ICP days report included inactive days. The report has now been corrected to only include active ICP days.	Still existing. Refer to section 11.2.
Creation of submission information	12.2	15.4 of Part 15	Revision files were submitted late in May 2017.	Cleared, no further late submissions have occurred. Refer to section 12.2.
Permanence of meter readings	12.8	4 of Schedule 15.2	A small amount of forward estimate remained for the final revisions for November 2015, December 2015 and January 2016. Not all meter readings were made permanent estimates by the 14 month revision.	Cleared. Refer to section 12.8.
Historical estimate process	12.11	4 of Schedule 15.3 and 15.2 of Part 15	Historic estimates were not calculated correctly where an ICP is inactive for part of a period, and where an ICP had switched out and back in.	Cleared. Refer to section 12.11.
Market Administrator meter reading reports	13.1	8 and 9 of Schedule 15.2	Meter reading frequency reports were not submitted prior to January 2017.	Cleared. Refer to section 6.9.
Historical estimate reporting	13.3	10 of Schedule 15.3	Historic estimate targets were not met for all revisions	Cleared. Refer to section 13.3.

Table of recommendations

Subject	Section	Clause	Non-compliance	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	Check internal data for consistency to identify data discrepancies, including checking that only MEPs with valid arrangements with WISE are used, and identification of ICPs with unmetered load.	Cleared. Refer to section 2.1 .
Withdrawal of switch requests	4.15	18 of Schedule 11.3	Record withdrawal request and withdrawal rejection reasons against each ICP.	Cleared. Refer to section 4.15 .
NHH meter data validation	9.5	Clause 16 of schedule 15.2	<p>I recommend some enhancements to the read validation checks:</p> <ul style="list-style-type: none"> • WISE should implement their intended change to review consumption patterns for the customer to help identify high or low reads. • Consider reviewing the volume billed each day, separate to the review of debit account balances. This will ensure all customers with high or low consumption will be checked daily, rather than only those with a debit balance. <p>Consider average daily consumption rather than monthly consumption in the reconciliation report checks. Comparison with the previous period or submission will improve WISE's checks of consumption against expected and previous patterns.</p>	Cleared. Refer to section 9.5 .

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

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

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

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

Audit observation

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

Audit commentary

WISE ensures that the data contained in PEBS matches the registry by importing registry data on switch in, and any changes received in notification files.

WISE has processes in place to identify and correct any misleading or incorrect information:

- a weekly match between PEBS and the registry confirms that statuses, ICP, and metering information is consistent - any discrepancies are checked and resolved
- monthly, WISE matches metering component information to PEBS, and identifies and resolves any discrepancies.

The analysis of the list file returned the following findings:

Item No.	Issue	2018	2017	2016	Comments
1	Status mismatch between registry and WISE	11	1	11	Non-compliance is recorded below, and discussed further in sections 3.8 and 3.9 .
2	Active with no MEP	-	-	-	Compliant
3	Incorrect submission flag	-	-	-	Compliant, all ICPs have submission type NHH.
4	Blank ANZSIC codes	-	-	-	Compliant
5	ANZSIC "T999" not stated	-	-	-	Compliant
6	ANZSIC "T994" don't know	-	-	-	Compliant
7	Category 9 but Active with MEP and UML "N"	-	-	-	Compliant

Item No.	Issue	2018	2017	2016	Comments
8	ICPs with Distributor unmetered load populated but retail unmetered load is blank	-	-	-	Compliant, no unmetered load was identified
9	ICPs with unmetered load flag Y but load is recorded as zero	-	-	-	Compliant, no unmetered load was identified
10	ICPs with incorrect shared unmetered load	-	-	-	Compliant, no unmetered load was identified
11	ICPs with Distributed Generation indicated but no DG profile	-	-	-	Compliant, no ICPs with distributed generation were identified.

The 2017 audit recommended internal data was checked for consistency. I have found that the notification process is adequate to ensure that any ICPs where unmetered load or distributed generation is installed after switch in will be identified.

A small number of registry data discrepancies were identified during the audit, and are recorded as non-compliance below:

- one reconnection was processed from an incorrect date due to human error as discussed in **section 3.8**
- ten disconnections were processed from an incorrect date, because WISE processed the update using the date the customer finalised their account not the physical disconnection date; this is discussed further in **section 3.9**.

Audit outcome

Compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 10.6, 11.2, 15.2 From: 01-Apr-17 To: 04-Jan-18	One ICP was not updated to active from the correct date. Ten ICPs were not updated to inactive from the correct date. Potential impact: Low Actual impact: Low Audit history: Three times 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 that most registry data is accurate, most of the time. The impact is low, NHH volumes consider inactive periods so all volume was reported and the net impact on the ICP days submission is zero.

Actions taken to resolve the issue	Completion date	Remedial action status
Changed process to be compliant / we started this process in Nov 17	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Process Change- Now updated as per disconnection and not by customer termination date	Nov 2017	

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

I reviewed the method to receive meter reading data from each MEP. I traced a sample of readings for 15 ICPs from the source files to PEBS. The sample included five ICPs for each MEP.

Audit commentary

All read data is transferred from the MEP to WISE via SFTP.

I traced a sample of readings for five HHR ICPs each for AMS, Metrix, and WEL Networks from the source files to PEBS. The reads matched the source files.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 10.4

Code related audit information

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

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

Audit observation

I reviewed WISE's current terms and conditions.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

The trader must use its best endeavours to provide access:

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

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

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

Audit observation

I reviewed WISE's current terms and conditions, and also discussed compliance with these clauses.

Audit commentary

WISE's contract with their customers includes consent to access for authorised parties for the duration of the contract.

In some cases, it was difficult to arrange access, because the customer could not be reached or failed to be at home at an agreed time. I found that in these situations access was granted after continued effort from WISE, or the customer switched out before access could be arranged.

Audit outcome

Compliant

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

Code reference

Clause 10.35(1)&(2)

Code related audit information

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

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

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

Audit observation

The registry list for 1 April 2017 to 4 January 2018 was reviewed.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11.15B

Code related audit information

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

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

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

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

Audit observation

I reviewed WISE's Terms and Conditions, which apply to all customers supplied.

Audit commentary

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

Audit outcome

Compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 10.33(1)

Code related audit information

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

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 10.33A(1)

Code related audit information

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

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections during the audit period; compliance was not assessed.

Audit outcome

Not applicable

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

The registry list for 1 April 2017 to 4 January 2018 was reviewed to identify all the networks WISE traded on during the audit period. Arrangements for line function services for these networks were discussed, and the agreements were viewed.

Audit commentary

WISE trades on the Unison, Vector and WEL networks.

WISE has current use of system agreements in place with Vector, Unison, WEL Networks, Centralines, and Orion.

Prior to switch in, ICPs are checked on the registry to confirm that they are connected to a network WISE trades on.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

The registry list for 7 April 2017 to 4 January 2018 was reviewed to identify the MEP for each ICP WISE supplied during the audit period. Arrangements for MEP services were discussed, and the agreements were viewed.

Audit commentary

WISE supplied ICPs with AMS, Metrix, Contact Energy, Legacy Metering Group, and WEL as MEPs.

- There are metering services agreements in place with AMS, Metrix, and WEL Networks.
- WISE has arrangements with Legacy Metering Group and Contact Energy. WISE replaces any legacy meters with AMI capable meters after switch in.

Prior to switch in, ICPs are checked on the registry to confirm that they have an MEP that WISE has an agreement with.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 11.7(2)

Code related audit information

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 10 Schedule 11.1

Code related audit information

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

Audit observation

The process to manage status changes is discussed in detail in **sections 3.8** and **3.9**. In this section, the event detail report for 1 April 2017 to 4 January 2018 was analysed determine the overall performance for that period.

A sample of the ten latest updates for each status type (or all if less than ten were available), were reviewed to determine the reasons for the late updates.

The process to manage a change of MEP on an existing ICP was examined. An event detail report for the audit period was reviewed, to identify all MEP changes during the period and determine whether they were within the required timeframes.

Audit commentary

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. There has been a significant improvement in performance since the 2017 audit.

Event	Year	Total ICPs	ICPs Notified Within 5 Days	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Change to active (2,0)	2017	140	29	111	19	21%
	2018	224	148	76	6	66%
Change to electrically disconnected vacant property (1,4)	2017	140	55	85	9	39%
	2018	20	19	1	4	95%

Event	Year	Total ICPs	ICPs Notified Within 5 Days	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Change to electrically disconnected ready for decommissioning (1,6)	2017	1	0	1	134	0%
	2018	5	-	5	303	0%
Change to electrically disconnected remotely by AMI meter (1,7)	2017	80	34	46	5	43%
	2018	392	363	29	6	93%
Change to electrically disconnected at pole fuse (1,8)	2017	-	-	-	-	-
	2018	8	2	1	6	67%
Change to electrically disconnected due to meter disconnected (1,9)	2017	-	-	-	-	-
	2018	16	16	-	4	100%

The table above shows that the registry was not updated within five business days for 112 (16.8%) of 665 ICPs where a status change has been made during the audit period. The late updates are recorded as non-compliance.

The registry was updated more than 30 business days after the actual event date for nine ICPs. Two of these status changes were to “Active”, two were to “Inactive - electrically disconnected remotely by AMI meter”, and five were to “Inactive - Ready for decommissioning”.

Late updates to active status

The ten latest status updates to active were reviewed and found to have been caused by status corrections, and backdated switches.

Late updates to inactive status

17 late status updates to inactive were checked, including the ten latest updates to each inactive status, or all late updates if less than ten updates were available. The late updates were caused by:

- A switch or withdrawal in progress preventing the status update from being completed on time for two ICPs.
- Delays while WISE confirmed whether the ICP was ready for decommissioning. ICPs were moved to ready for decommissioning status once WISE confirmed they were demolished, about to be demolished, the registry address did not physically exist, or had been fire damaged.
- One ICP was accidentally missed from disconnection list, and later identified through billing validations.
- Two ICPs had their disconnection status code corrected from 1,7 to 1,6. The incorrect status code was assigned prior to this audit period, so is not recorded as non-compliance.

- Some disconnections were processed from an incorrect date, because WISE processed the update using the date the customer finalised their account, not the physical disconnection date. This is discussed further in **section 3.9**.

MEP nominations

Review of the event detail report found 312 MEP nominations. The nomination date was compared to the metering event effective date to identify any ICPs that were not nominated within five business days. 308 (99%) of the nominations were within the required timeframe, and four were late. The late updates occurred because WISE waited for the MEP to confirm the correct event date, at the MEP's request.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 01-Apr-17 To: 04-Jan-18	112 late status updates. Four late MEP nominations. 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	The controls are rated as moderate because they are adequate to ensure that the registry is updated on time most of the time, but there is room for improvement. The risk is low as most updates were completed on time or soon after they were due.		
Actions taken to resolve the issue		Completion date	Remedial action status
Inactive Statuses are updated as per disconnection date. MEP Nominations and Decommissions are updated once informed by MEP or Network. Active updates depends on the date of switch and switch details.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Inactive Statuses are updated as per disconnection date. MEP Nominations and Decommissions are updated once informed by MEP or Network. Active updates depends on the date of switch and switch details.		Ongoing	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

Audit observation

The registry list and event detail report for the period from 1 April 2017 to 4 January 2018 were reviewed to:

- identify all new connections during the period
- confirm whether all active, metered ICPs have an MEP recorded
- identify all MEP nominations during the period; and
- identify all decommissions during the period.

Audit commentary

No new connections were completed.

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

312 MEP nominations were made; all were accepted by the MEP. The timeliness of MEP nominations is discussed in **section 3.3**.

16 WISE ICPs were decommissioned. A sample of ten decommissioned ICPs were checked to confirm a final interrogation took place prior to or upon meter removal.

WISE had met their obligation to arrange a meter interrogation prior to or upon meter removal. In two cases they were unable to complete the interrogation because the meter was fire damaged, or had been removed without WISE's knowledge.

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 five business days of trading (clause 9(2)).

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections during the audit period; compliance was not assessed.

Audit outcome

Not applicable

3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)

Code reference

Clause 9 (1(k) of Schedule 11.1

Code related audit information

Traders are responsible to populate the relevant ANZSIC code for all ICPs for which they are responsible.

Audit observation

ANZSIC codes were examined on the registry list file as at 4 January 2018.

Audit commentary

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

The process to identify and monitor unmetered load was discussed. The registry list was reviewed to identify all unmetered load.

Audit commentary

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

WISE will identify any unmetered load added to its ICPs when registry notification files are received, as discussed in **section 2.1**. The details will be checked for any affected ICPs, and WISE will arrange for the ICP to switch out effective from the date the unmetered load was connected.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The reconnection process was examined. The event detail report for 1 April 2017 to 4 January 2018 was analysed. The findings in relation to the timeliness of updates to registry are recorded in **section 3.3**.

Audit commentary

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

Reconnections typically occur when an inactive ICP switches in, or once payment has been received following a credit disconnection. Reconnection data is provided via FTP by Metrix and WEL Networks, and by email by AMS. Metrix and WEL Networks reconnection data is imported into PEBS and updates automatically. AMS reconnection data is processed manually in PEBS.

The Registry is updated manually. Any ICPs updated in PEBS but not on the registry will be identified through the weekly match to the registry as discussed in **section 2.1**. If an ICP is reconnected within five business days of disconnection it will not be updated to inactive on the registry, so a registry update to active may not be required on reconnection. This is discussed further in **section 3.9**.

224 ICPs had status changes to active during the audit period. I checked a typical sample of 170 ICPs to determine whether they had certified metering installations in place, including all reconnected ICPs still supplied by WISE. 169 of the 170 ICPs checked had final metering certification in place on the registry. ICP 0000117491UN9A8 has interim certification recorded, but the MEP confirmed the metering is final certified and the registry information is incorrect. The MEP intends to update the registry.

A typical sample of ten status changes to active were checked to confirm that the correct status and date had been applied. Nine changes were processed correctly, but ICP 0476537126LCBCA was recorded with an event date of 10/07/2017, this should have been recorded with 05/07/2017. This is recorded as non-compliance below.

Late registry updates to active are recorded as a non-compliance in **section 3.3**.

WISE's PEBS system will not allow more than one party per ICP nor will it allow an ICP to be set up without both a meter and Metering Equipment Provider.

Audit outcome

Compliant

Non-compliance	Description
Audit Ref: 3.8 With: Clause 17 Schedule 11.1 From: 06-Jul-17 To: 09-Jul-17	One ICP was not updated to active from the correct date. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	Controls are rated as moderate, as they are sufficient to ensure that most status changes to active are processed correctly. The manual process can result in some processing errors. The impact is low, only one ICP was affected and the difference was five days. ICP days were under reported by five days. NHH volumes consider inactive periods so all volume was reported.

Actions taken to resolve the issue	Completion date	Remedial action status
Active Updates to the registry are done as per the switching information or date reconnected by WISE	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Active Updates to the registry are done as per the switching information or date reconnected by WISE	Ongoing	

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The disconnection process was discussed. The event detail report for 1 April 2017 to 4 January 2018 was analysed to identify all disconnections during the period.

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

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

Audit commentary

Disconnections are usually remote, and are not processed if a switch is in progress.

Disconnection data is provided via FTP by Metrix and WEL Networks, and by email by AMS. Metrix and WEL Networks disconnection data is imported into PEBS and updates automatically. AMS disconnection data is processed manually in PEBS.

If disconnected for credit, the registry is not updated immediately. WISE maintains a list of customers sent to the MEPs for disconnection, with the disconnection date. Each day they compare the list of customers disconnected for credit, to the list of customers reconnected.

- If reconnected, the customer is taken off the disconnected list and the site is left as active on the registry.
- If the customer remains on the disconnected list for a week or more, the registry is updated to inactive effective from the disconnection date and the customer account is closed in PEBS. Late updates to inactive status are recorded as non-compliance in **section 3.3**.

In some cases, it is difficult for WISE to confirm whether an ICP is vacant, as their customers do not always inform WISE when they move out. These will be treated as a credit disconnection until vacancy is confirmed.

If disconnected for vacancy, WISE requests disconnection for the move out date, and updates PEBS and the registry as soon as possible after receiving confirmation from the MEP. PEBS and the registry are normally updated to disconnected status from the customer's move out date, rather than the disconnection date.

441 ICPs were disconnected during the audit period. I reviewed the reason codes and disconnection dates for the sample of 27 disconnections, and found ten disconnections were processed from an incorrect date because WISE processed the update using the date the customer finalised their account not the physical disconnection date.

ICP	Disconnection date applied	Physical disconnection date	Difference
0405024355LC9F8	04/10/2017	12/10/2017	8
0075342065WED9A	06/10/2017	18/10/2017	12
0420507035LC2B1	01/05/2017	03/05/2017	2
0428549039LC72C	02/04/2017	18/04/2017	16
0314483020LCB82	30/06/2017	12/07/2017	12
0458439746LC1C9	5/04/2017	27/03/2017	-9
0000033840HRD28	25/04/2017	18/04/2017	-7
0000447762UN8DB	25/04/2017	10/04/2017	-15
0002549177WE4A0	22/06/2017	15/06/2017	-7
1001247958LCA3C	10/04/2017	03/04/2017	-7
Total			5

Late registry updates are recorded as a non-compliance in **section 3.3**.

Registry updates processed from incorrect dates, and not updating the registry where an ICP has been inactive for less than five business days are recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.9</p> <p>With: Clause 19</p> <p>Schedule 11.1</p> <p>From: 01-Apr-17</p> <p>To: 04-Jan-18</p>	<p>10 ICPs were updated to inactive from the date the customer account was finalised, not the disconnection date.</p> <p>Credit disconnections are only updated to inactive once they have been disconnected for five business days or more.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times previously</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as weak as they are not sufficient to ensure that disconnections are processed correctly on the registry most of the time.</p> <p>The impact is rated as low, because inactive days are included in reconciliation submissions so no consumption will be missed. ICP days will be over reported by five days. Most of the issues identified occurred early in the audit period.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Process Changed- Registry now updated based on the date of disconnection, regardless of the date of account termination of a customer		Nov 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Process Changed- Registry now updated based on the date of disconnection, regardless of the date of account termination of a customer – we have also implemented a weekly report to show registry mismatch		Ongoing	

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Audit observation

The registry list and event detail report for 1 April 2017 to 4 January 2018 were reviewed to identify all new connections.

Audit commentary

WISE has not completed any new connections.

Audit outcome

Not applicable

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

Within three business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12-month period, at least 50% of the event dates must be no more than 5 business days after the date of notification. The losing trader must then:

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

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

Audit observation

An event detail report for 1 April 2017 to 4 January 2018 was reviewed to:

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

A sample of two ANs per response code (or all if less than two were available) were reviewed to determine whether the response codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

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

Event dates set by losing trader must be no more than 10 business days after receipt of an NT file. Over a 12 month period 50% of event dates must be within five business days.

WISE frequently pushes proposed event dates out to the maximum date permissible, to allow time to contact their customer to discuss their pre-pay arrangements prior to switch out.

AN files were examined on the event detail report. All proposed event dates were within 10 business days of NT receipt, but only 7.5% of proposed event dates were within five business days. This is recorded as non-compliance below.

Total transfer switches	Total over 10 business days	Total within 10 business days	Total within 5 business days	% within 5 business days
534	0	534	40	7.5%

I also reviewed the completed transfer switches on the event detail report. All transfer switches were completed within 10 business days of the NT receipt, and over 50% were completed within five business days of the NT receipt.

The 2017 audit found some AN files had the AA (accept and acknowledge) code applied, when they should have had AD (advanced metering). I reviewed a sample of two ANs for each AN response code used. I specifically checked whether the AA code was only used when none of the other codes were relevant. I found one AN file where an incorrect response code was applied due to human error:

ICP	Applied Code	Correct Code
0082091325WE6FF	“AA” (acknowledge and accept)	“AD” (advanced metering)

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.2</p> <p>With: Clauses 3 and 4 Schedule 11.3</p> <p>From: 01-Apr-17</p> <p>To: 04-Jan-18</p>	<p>Less than 50% of proposed event dates were within five business days after the NT was received.</p> <p>An incorrect AN response code was applied for one switch.</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 are rated as weak overall, as the controls over setting of event dates are not sufficient to ensure that at least 50% of proposed event dates are within five business days of the NT receipt. The controls over AN responses, are moderate. They are sufficient to ensure that the correct code is applied most of the time, but there is room for improvement.</p> <p>The impact is assessed as low:</p> <ul style="list-style-type: none"> over 50% of transfer switches completed had event dates within five business days of the NT receipt information available on the registry confirmed that 0082091325WE6FF had advanced metering, lessening the impact of the incorrect AN response code being applied. 		
Actions taken to resolve the issue		Completion date	Remedial action status
Even though the date in AN is for 10 working days, the actual CS was sent in less than 5 working days for close to 66% of switches / also see comments on Participant Response section		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The AN date is now changed to reflect the less than 5 working days when actual CS might be sent		February 2018	

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

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

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

Audit observation

An event detail report for the period from 1 April 2017 to 4 January 2018 was reviewed, to identify CS files issued by WISE. The accuracy of the content of CS files was confirmed by checking a sample of five records. The content checked included:

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

The process to manage the sending of the CS file within five business days of the event date was examined.

The switch breach history report for the audit period was reviewed to identify late CS files, and an extreme case sample of the latest ten files were checked.

Audit commentary

The switch breach report recorded 163 late transfer CS files; CS files should be sent within five business days of the event date. Of the 163 files, 27 were confirmed to have been sent within five business days of the event date, and appeared on the switch breach report in error. The latest file was 13 days overdue.

I checked a sample of the ten latest CS files to determine the reasons for the delays, and found that all were late because WISE could not reach the customer to discuss their pre-pay arrangements prior to switch out.

The CS content issues identified in the 2017 audit were re-checked:

- The CS process has been corrected to use the reading recorded on the last day of supply, instead of the last actual reading before the switch.
- When an NT is received, WISE contacts their customer to determine whether they wish to use their credit balance, or require a refund. If they request a refund, WISE removes reads after the NT receipt date and estimates zero consumption for the remainder of the period of supply. This estimated switch reading is recorded as actual. This is non-compliant, as actual readings or the best estimate of consumption should always be applied. If the customer agrees to use their credit balance, actual readings are recorded between the NT receipt date and switch out date.
- If an ICP is vacant, the closing read for the last customer is used in the CS. I note that vacant ICPs are expected to be requested as switch moves, and non-compliance is recorded in **section 4.10**.

The accuracy of the content of CS files was confirmed by checking a sample of five transfer CS files. I found the meter readings and dates were all recorded correctly. Read types are entered into the switch files as actual by PEBS, and need to be manually changed to estimate before the file is transferred to the

registry. The following CS files had read types recorded as actual when they should have been estimates.

ICP	Switch event date	CS read type	Correct CS read type
000165417UN494	26/03/2017	A	E
0000809422HB2E9	11/04/2017	A	E
0006002925WE76D	15/07/2017	A	E
0361598378LC813	25/08/2017	A	E

Late CS files and incorrect CS file content is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.3</p> <p>With: Clause 5 Schedule 11.3</p> <p>From: 01-Apr-17 To: 04-Jan-18</p>	<p>136 late CS files for transfer switches.</p> <p>If the switch event date is after NT receipt and the customer does not wish to use their credit balance, consumption between the NT date and switch date is estimated as zero, and the switch read is recorded as actual.</p> <p>If an ICP is vacant, the closing read for the last customer is used in the CS.</p> <p>Four CS files with correct readings had estimated readings incorrectly recorded as actual.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Three times previously</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, as they are unlikely to prevent incorrect CS reads from being applied in certain circumstances.</p> <p>The impact is assessed as low. The latest transfer CS was 13 days overdue, and no incorrect readings were identified for transfer CS files, only read type issues.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
The CS files date depends on the customer's request to close account. Also the NT request date and the NT received dates are different which makes for confusion in the actual time taken to process CS / also see comments in Participant Response section	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
The AN files are updated with dates closer to the request date and probable CS date. Customers are contacted ASAP to confirm request.	Feb 2018	

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The process for the management of read requests was examined.

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

All read change requests for transfer switches were reviewed to confirm that information provided in the request was correct, and that the reads recorded in PEBS were consistent with the acceptance or rejection provided by the other retailer.

A diverse characteristics sample of ten read changes for transfer switches issued by other retailers were reviewed, to ensure that they had been handled correctly.

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

Audit commentary

When a high or low read is identified through the read validation process for a new switch in, the ICP is investigated to determine whether a read change is required. If the difference is small, WISE waits to see if the AMI readings will “catch up” and exceed the switch read before issuing an RR. This process is discussed further in **section 9.5**.

WISE issued two read change requests for transfer switches, both were based on estimated readings and matched the values recorded in PEBS.

WISE received 13 read change requests for transfer switches, relating to ten ICPs. A sample of ten were reviewed, and all had the expected read recorded in PEBS based on the outcome of the read change process.

No late read change requests or acknowledgements were identified for transfer switches.

Audit outcome

Compliant

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

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

Audit commentary

WISE only uses submission type NHH and did not issue any read change requests where clause 6(2) and (3) of schedule 11.3 applied.

The read change for 0000441322WEFFE was invalidly rejected, but it was resent and accepted. The change was initially rejected because the customer told WISE that they wanted to be invoiced for consumption from the NT date by their new retailer.

The read change for ICP 0000141801UNCF7 was invalidly rejected. As discussed in **section 4.10**, the reading recorded in the CS file was not an actual reading for the correct date, it was an estimated reading based on the last actual read received before the customer moved out. WISE should have

accepted Flick's read change, which was received within five business days of the event date. WISE's CS read was 122 kWh too low.

Rejection of two read changes issued under clauses 6(2) and (3) of schedule 11.3 is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.5</p> <p>With: Clause 6(2) and (3) Schedule 11.3</p> <p>From: May and November 2017</p>	<p>Two read changes issued under clauses 6(2) and (3) of schedule 11.3 were rejected.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate, as there is room for improvement.</p> <p>The risk rating is low. WISE received read change requests for 24 ICPs from other retailers in total, rejections were checked and only two were found to be invalidly rejected under this rule. One of the invalidly rejected RR files was later accepted, and the other resulted in a difference of 122 kWh.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Issues occur since customers want to transfer outstanding invoices from previous retailer to us – once switch occurred customer then informs us that they wish to switch out again within a short space of time – leaving Wise with the previous retailers "Bad Debt" and no way of recovering debt		Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We have stopped taking on customers with outstanding invoices from their previous retailers, and are considering implementing an initial short term contractual obligation for customer's to stay with Wise (at least 3 months) to counter this risk to our business.		Jan 2018	

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

Code reference

Clause 7 Schedule 11.3

Code related audit information

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

Audit observation

Disputes were discussed with WISE.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.3

Code related audit information

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

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

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

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

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

Audit observation

The process to manage the sending of switch information within five business days of the event date was examined.

An event detail report for the period from 01/04/2017 to 04/01/2018 was reviewed, to identify AN files issued by WISE during the audit period. A sample of two ANs per response code were reviewed to determine whether the codes had been correctly applied.

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

Audit commentary

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

I reviewed 587 switch moves, and found that all were between one and ten business days after the NT receipt date.

The 2017 audit found some AN files had the AA (accept and acknowledge) code applied, when they should have had AD (advanced metering). I reviewed a sample of two ANs for each AN response code used. I specifically checked whether the AA code was only used when none of the other codes were relevant. I found one AN file where an incorrect response code was applied due to human error:

ICP	Applied Code	Correct Code
0000151099UN9E8	"MU" (unmetered supply)	"OC" (occupied premises)

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.8 With: Clause 10(1) Schedule 11.3 From: 24-Feb-17 To: 08-May-17	An incorrect AN response code was applied for one switch. 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	The controls over AN responses are moderate. They are sufficient to ensure that the correct code is applied most of the time, but there is room for improvement. The impact is assessed as low. Information available on the registry confirmed that 0000151099UN9E8 was not an unmetered supply, lessening the impact of the incorrect AN response code being applied.		
Actions taken to resolve the issue		Completion date	Remedial action status
Staff training for more accurate processing of switches		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Staff training for more accurate processing of switches		Ongoing	

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

Code reference

Clause 10(2) Schedule 11.3

Code related audit information

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

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

Audit observation

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

Audit commentary

Analysis found no switch move AN files where the event date was set greater than ten business days after the NT receipt date. No switch move AN files had a proposed event date before the losing trader's proposed date.

Switches were completed as required by this clause.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 11.3

Code related audit information

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

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

Audit observation

An event detail report for the period from 1 April 2017 to 4 January 2018 was reviewed, to identify CS files issued by WISE. The accuracy of the content of CS files was confirmed by checking a sample of five records. The content checked included:

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

The process to manage the sending of the CS file within five business days of the event date was examined.

The switch breach history report for the audit period was reviewed to identify late CS files, and an extreme case sample of the five latest files were checked.

Audit commentary

The switch breach report recorded 301 late switch move CS files; CS files should be sent within five business days of the NT receipt date.

Of the 301 files, 44 were confirmed to have been sent within five business days of the event date, and appeared on the switch breach report in error. The latest file was 56 days overdue.

I checked a sample of ten latest CS files to determine the reasons for the delays, and found that they delays were caused by backdated NT requests from the gaining retailer.

CS content issues identified in the 2017 audit were re-checked:

- The CS process has been corrected to use the reading recorded on the last day of supply, instead of the last actual reading.

- When an NT is received, WISE contacts their customer to determine whether they wish to use their credit balance, or require a refund. If they request a refund, WISE removes reads after the NT receipt date and estimates zero consumption for the remainder of the period of supply. This estimated switch reading is recorded as actual. This is non-compliant, as actual readings or the best estimate of consumption should always be applied. If the customer agrees to use their credit balance, actual readings are recorded between the NT receipt date and switch out date.
- If an ICP is vacant, the closing read for the last customer is used in the CS.

The accuracy of the content of CS files was confirmed by checking a sample of five switch move CS files. I identified three switches where the switch reading was recorded as actual when it related to a date before the end of the period of supply, usually the previous customer's final reading date.

ICP	Switch event date	Switch read and type	Correct read and type	Difference	Comment
0000011340WEA40	10/10/2017	20643 (A)	20640 (A)	-3 kWh	Switch read related to 02/10/2017 and was estimated.
0000029391HR980	7/12/2017	12732 (A)	12733 (A)	1 kWh	Switch read related to 22/11/2017 and was estimated.
0021449220LCE85	30/11/2017	5746 (A)	5760 (A)	14 kWh	Switch read related to 27/11/2017 and was estimated.

Through other audit checks, more CS file content issues were identified:

ICP	Switch event date	Switch read and type	Correct read and type	Difference	Comment
0006010451WED93	10/01/2018	10217 (A) 0 (A)	10357 (A) 115 (A)	255 kWh	Switch read related to 15/12/2017 and was estimated.
0000313546WE23D	01/01/2018	52742 (A) 0 (A)	52744 (A) 0 (A)	2 kWh	Switch read related to 17/12/2017 and was estimated.
0000025765WE1F7	30/12/2017	32192 (A) 257 (A)	32216 (A) 285 (A) on 01/01/2018	< 52 kWh	Switch read related to 25/12/2017 and was estimated.
0000138816UND89	22/12/2017	12126 (A)	12189 (A) on 31/12/2017	< 63 kWh	Switch read related to 10/12/2017 and was estimated.
0006010961WEF63	28/12/2017	15869 (A) 0 (A)	15875 (A) 0 (A) on 31/12/2018	< 6 kWh	Switch read related to 26/12/2017 and was estimated.
0000141801UNCF7	20/11/2017	36457 (A)	36579 (A)	122 kWh	Switch read related to 29/05/2017 and was estimated.

Read types are entered into the switch files as actual by PEBS, and if necessary are manually changed to estimate before the file is transferred to the registry. The following CS file had the read type recorded as actual when it should have been estimated.

ICP	Switch event date	CS read type	Correct CS read type
0000030034WE579	3/10/2017	A	E

Where the MEP only provides total consumption for the meter, WISE records the total reading against register 1 in the CS file.

Provision of inaccurate switch readings also affects reconciliation submission accuracy, as is discussed further in **section 12.7**.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.10</p> <p>With: Clause 11 Schedule 11.3</p> <p>From: 01-Apr-17</p> <p>To: 04-Jan-18</p>	<p>257 late CS files for switch moves.</p> <p>If an ICP is vacant, the closing read for the last customer is used in the CS.</p> <p>If the switch event date is after NT receipt and the customer does not wish to use their credit balance, consumption between the NT date and switch date is estimated as zero, and the switch read is recorded as actual.</p> <p>One CS with correct readings had estimated readings incorrectly recorded as actual.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Three times previously</p> <p>Controls: Weak</p> <p>Breach risk rating: 6</p>

Audit risk rating	Rationale for audit risk rating		
Medium	<p>Controls are rated as weak, as they are unlikely to prevent incorrect CS reads and late CS files.</p> <p>Incorrect switch reads are only applied in certain circumstances; either where the account has been vacant prior to the switch request, or the switch event date is after NT receipt and the customer does not wish to use their credit balance. The maximum total difference for the errors identified was 515 kWh.</p> <p>Most switch moves files checked contained correct readings. The likely number of switches affected is difficult to quantify without checking each one, as so many variables affect the outcome. I note that vacant sites are usually disconnected the day that they become vacant, and any consumption between the ICP becoming vacant and the switch is likely to have occurred after the gaining retailer completed a reconnection.</p> <p>All but one of WISE's customers are domestic, and all are expected to have relatively low estimated daily consumption.</p> <p>Based on this, I believe the impact is medium there could potentially be a moderate impact on consumers and other participants.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
AN dates were updated to the maximum time it might take for the transfer, however the CS itself was sent on / closer to the date requested on NT / also see comments in Participant Response section		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
AN dates reflect the Dates requested on NT and CS files are sent accordingly		Feb 2018	

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

Code reference

Clause 12 Schedule 11.3

Code related audit information

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

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

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

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

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

Audit observation

The process for the management of read requests was examined.

The event detail report for the period from 1 April 2017 to 4 January 2018 was reviewed to identify all read change requests and acknowledgements.

All read change requests for transfer switches were reviewed to confirm that information provided in the request was correct, and that the reads recorded in PEBS were consistent with the acceptance or rejection provided by the other retailer.

A diverse characteristics sample of ten read changes for transfer switches issued by other retailers were reviewed, to ensure that they had been handled correctly.

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

Audit commentary

When a high or low read is identified through the read validation process for a new switch in, the ICP is investigated to determine whether a read change is required. If the difference is small, WISE waits to see if the AMI readings will “catch up” and exceed the switch read before issuing an RR. This process is discussed further in **section 9.5**.

WISE issued 22 read change requests for switch moves. A sample of ten were reviewed, to ensure that they had been handled correctly. The following issues were identified:

- For ICP 0000151287WE698, WISE’s RR was rejected, but PEBS reflected the RR readings. WISE supplied this ICP from 18/08/2017 - 04/09/2017. Following receipt of readings WISE issued an RR request, which was rejected by the losing trader. Shortly after that, the ICP switched out. As WISE was no longer the current trader they could not issue another RR without withdrawing the switch, which they elected not to do. The RR read was left in PEBS as WISE believed it was accurate, and the volume difference is -103 kWh. This is recorded as non-compliance below. Inaccurate recording of switch readings also affects reconciliation submission accuracy, as is discussed further in **section 12.7**.

- For ICPs 0000279695HBE86 and 0000480698WEFC8 read types were recorded in the RR files as actual, when they were estimates. The read types in the RR files should have been manually corrected.
- For ICP 0339234350LC240 the read was recorded as actual in PEBS, but should have been an estimate.

WISE received 12 read change requests for switch moves, relating to 11 ICPs. A sample of ten were reviewed, and all had the expected read recorded in PEBS based on the outcome of the read change process. For ICPs 0000705831WEB3 and 0001400171UN1FC the read changes were accepted, and the reads applied in PEBS were correct, but recorded against the event date instead of the day before. For both ICPs I verified that there was no consumption between the correct date and applied date, and that historic estimate was reported correctly.

Two late read change requests were identified for switch moves. Both were checked:

- For ICP 0000279695HBE86, WISE had found that the switch read was high based on AMI readings received. WISE intended to wait for the AMI readings to “catch up” as discussed in **section 9.5**, but as the process was taking longer than expected decided to issue an RR.
- ICP 0000310865WE440 had a meter replacement, and WISE was waiting for data from the new meter to be received.

Non-compliance is recorded for late read change requests, and incorrect recording of some reads, read types, and dates.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.11</p> <p>With: Clause 12</p> <p>Schedule 11.3</p> <p>From: 01-Apr-17</p> <p>To: 04-Jan-18</p>	<p>An accepted read change was not applied in PEBS.</p> <p>Two read change requests were late.</p> <p>Two ICPs had incorrect read types recorded in RR files, and one ICP had an incorrect read type recorded in PEBS.</p> <p>Two changed reads were recorded against an incorrect date in PEBS.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are rated as moderate as they are sufficient to ensure that RR files are processed on time and correctly most of the time, but there is room for improvement.</p> <p>The risk rating is low, the difference in consumption for incorrectly processed RR files is -103 kWh.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
Staff training for better processing of Switch Requests	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Staff training for better processing of Switch Requests	Ongoing	

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 3 business days after the arrangement comes into effect.

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

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

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

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

- 14(4)(a) – the proposed event date is in the same month as the date on which the gaining trader advised the registry manager; or*
- 14(4)(b) – the proposed event date is no more than 90 days before the date on which the gaining trader advises the registry manager and this date is agreed between the losing and gaining traders.*

Audit observation

An event detail report for the period from 1 April 2017 to 4 January 2018 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

No HH switches occurred during the audit period.

Audit outcome

Not applicable

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

Code reference

Clause 15 Schedule 11.3

Code related audit information

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

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

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

Audit observation

An event detail report for the period from 1 April 2017 to 4 January 2018 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

No HH switches occurred during the audit period.

Audit outcome

Not applicable

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

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

An event detail report for the period from 1 April 2017 to 4 January 2018 was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

No HH switches occurred during the audit period.

Audit outcome

Not applicable

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

Code reference

Clauses 17 and 18 Schedule 11.3

Code related audit information

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

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

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

The event detail report for 1 April 2017 to 4 January 2018 was analysed to identify all switch withdrawal requests (NW) and acknowledgements (AW).

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

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

Audit commentary

174 NWs were issued by WISE. 12 were checked, and I confirmed that the correct codes were applied. 76 had the code CX (customer cancellation); all were requested after the switch was completed.

No late NW or AW files were recorded on the switch breach report.

119 AW files were sent by WISE; all were sent within five business days of the NW receipt date. Three NWs were not sent within two calendar months of the event date. This is recorded as non-compliance below. The files were late because:

- there was a delay in receiving a tenancy agreement from the customer to confirm their move in date, for a date failed NW
- there was a delay in the customer confirming that they wished to remain with WISE, for a customer cancellation NW
- there was a delay in confirming the correct ICP for a wrong premises NW.

9 NWs issued by another retailer were rejected, and 110 were accepted. Two rejected NWs were accepted once re-issued. I reviewed the other seven rejected NWs, and found they were rejected on the customers instructions, because the ICP had been vacant with WISE, or because the other retailer had not provided sufficient information.

The 2017 audit recommended that additional information should be recorded for withdrawals, so that withdrawal request and rejection reasons can be confirmed. This recommendation has been implemented, and sufficient information was available for all withdrawals checked.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.15 With: Clauses 17 and 18 Schedule 11.3 From: August-September 2017	Three NWs were issued more than two calendar months after the switch event date. 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 as they are sufficient to mitigate risk most of the time. A small proportion of NWs (2%) were late.		
Actions taken to resolve the issue		Completion date	Remedial action status
Staff training to make switch process as accurate as possible		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Staff training to make switch process as accurate as possible		Ongoing	

4.16. Metering information (Clause 21 Schedule 11.3)

Code reference

Clause 21 Schedule 11.3

Code related audit information

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

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

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

Audit observation

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

Audit commentary

The reads applied in switching files were examined in **section 4.3** for standard switches, **section 4.10** for switch moves, and **sections 4.4** and **4.11** for read changes.

In most cases, the meter readings used in the switching process are validated meter readings or permanent estimates. I found that in some circumstances, the reads applied in CS and RR files were not consistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date. Nine switch move CS files reflected the last actual read before the ICP became vacant, rather than the actual reading on the event date. The maximum total difference for the errors identified was 515 kWh.

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

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.16 With: 21 Schedule 11.3 From: 01-Apr-17 To: 04-Jan-18	Readings in nine switch move CS files were inconsistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date. Potential impact: Medium Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3

Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as weak, as they are unlikely to prevent incorrect CS and RR reads from being applied in certain circumstances.</p> <p>The impact is assessed as low overall, no incorrect CS reads were identified for transfer switches, and most switch move CS and RR files checked contained correct readings.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Staff Training to make sure switch details are correct		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Staff Training to make sure switch details are correct		Ongoing	

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

Code reference

Clause 11.15AA to 11.15AB

Code related audit information

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

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

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

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

Audit observation

The Electricity Registry switch save protected retailer list was examined.

Win-back processes were examined to determine whether they are compliant. The event detail report for 1 April 2017 to 4 January 2018 was analysed to identify all withdrawn switches with a CX code applied prior to the switch completion date for any switch save protected retailer.

Audit commentary

WISE is not a save protected retailer.

WISE contacts the customers for ICPs requested by another retailer only to confirm that the switch request is valid. No win-back activity is initiated with lost customers during the switch.

The event detail report identified 76 CX coded switch withdrawal requests; all were sent after the switch was completed.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

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

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

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

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

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

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

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

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

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list for 1 April 2017 to 4 January 2018 was reviewed to identify all unmetered load.

Audit commentary

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

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

Audit outcome

Compliant

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list 1 April 2017 to 4 January 2018 was reviewed to identify all unmetered load.

Audit commentary

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

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

Audit outcome

Compliant

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list for 1 April 2017 to 4 January 2018 was reviewed to identify all unmetered load.

Audit commentary

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

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

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 15.3, Clause 15.37B

Code related audit information

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

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

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

Audit observation

The process to identify and monitor unmetered load was discussed. The registry list for 1 April 2017 to 4 January 2018 was reviewed to identify all unmetered load.

Audit commentary

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

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

Audit outcome

Compliant

6. GATHERING RAW METER DATA

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

Code reference

Clause 10.13, Clause 10.24 and Clause 15.13

Code related audit information

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

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

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

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

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

Audit observation

Processes for distributed generation were reviewed. A registry list with history for 1 April 2017 to 4 January 2018 was examined to confirm whether WISE had supplied any ICPs with generation during the audit period.

Audit commentary

Analysis of the registry list found that WISE has not supplied any ICPs with generation capacity during the audit period. WISE does not intend to supply any ICPs with distributed generation. WISE's application process rejects any application which has "B" in the Installation Type field.

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

WISE provided a list of five ICPs where remote disconnection had occurred then the meter had been bridged to reconnect. For two examples, the bridged period occurred after the ICP switched to a new retailer, but for three the bridged period occurred within WISE's period of supply. This is recorded as non-compliance below. The bridged meters had all later been unbridged or replaced. Non-compliance is recorded in **section 8.1** in relation to estimation of consumption during bridged periods.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.1 With: Clause 10.13, 10.24 and 15.13 From: June, July and November 2017	Energy is not metered and quantified according to the code where meters are bridged. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate as they are sufficient to mitigate risk most of the time, but there is room for improvement. Bridging only occurs where a soft reconnection cannot be performed after hours and the customer urgently requires their energy supply for health and safety reasons.		
Actions taken to resolve the issue		Completion date	Remedial action status
When the meter is unbridge, it will be registered as a new meter with the current reading value – this process requires some programming and estimated completion date end of March 18		March 2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Once development work completed - New process will ensure estimate reading will occur during the bridged period.		March 2018	

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

Code reference

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

Code related audit information

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

- provide to the grid owner a copy of the metering installation design (before ordering the equipment)
- provide at least three months for the grid owner to review and comment on the design

- *respond within three business days of receipt to any request from the grid owner for additional details or changes to the design*
- *ensure any reasonable changes from the grid owner are carried out.*

The participant responsible for the metering installation must:

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

Audit observation

The NSP table was reviewed.

Audit commentary

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

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

The registry list for 1 April 2017 to 4 January 2018 was reviewed, to identify any ICPs with profiles that require certification of the control device.

Audit commentary

Examination of the list file found that WISE has only used the RPS profile, and control devices are not used for reconciliation purposes.

Audit outcome

Compliant

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

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

Audit observation

Processes relating to defective metering were examined.

WISE provided six examples of defective meters. They were reviewed to determine whether the MEP was advised and if appropriate action was taken.

Audit commentary

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

I confirmed that for all six possible defective meter examples provided, the MEP was notified and appropriate action was taken.

- Five ICPs had meters with intermittent communications issues. Consumption was estimated, and replaced with actual readings once communication was restored.
- One ICP had a blown meter reported by the customer. The meter was replaced, and an estimated closing read was applied, as an actual reading could not be obtained from the meter.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

AMI data is provided by AMS, Metrix, and WEL Networks as MEPs. Interrogation requirements and clock synchronisation was reviewed as part of their MEP audits.

Audit commentary

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

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

No manual reads are received for non AMI meters, and WISE arranges for any affected ICPs to be upgraded to AMI. Meter readings are estimated until an actual meter replacement reading is received.

The registry list showed three ICPs with non AMI meters; two have now been upgraded to AMI and readings are being received. ICP 0000206992HBF9A is still in the process of being upgraded. A service request was issued when the ICP switched in during December 2017, and an MEP nomination has been accepted on the registry.

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

AMI data is provided by AMS, Metrix and WEL Networks as MEPs. Meters are not manually read.

Audit commentary

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

Where a meter is not AMI capable, WISE estimates readings until the meter is replaced. Replacement is requested as soon as possible after switch in. WISE currently supplies one ICP without an AMI capable meter, and an upgrade is in progress.

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

Audit outcome

Compliant

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

Code reference

Clause 6 Schedule 15.2

Code related audit information

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

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

Audit observation

The process of the application of meter readings was examined.

Audit commentary

WISE imports the midnight AMI midnight readings, which are applied as at 2400hrs. Application of reads was reviewed as part of the historic estimate checks, discussed in **section 12.11**.

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. An extreme case sample of ten ICPs not read during the period of supply were reviewed to determine whether exceptional circumstances existed.

Audit commentary

All reads received are from AMI meters, from the MEP on meter exchange paperwork, or through the switching process. WISE normally requires ICPs to have AMI capable metering installed prior to switching in. A small number of ICPs with legacy meters have been switched in over the last two years, with the intention of upgrading the metering.

WISE currently supplies one ICP which does not have an AMI capable meter, which is in the process of being upgraded. A service request was issued when ICP 0000206992HBF9A switched in during December 2017, and an MEP nomination has been accepted on the registry effective from 18/01/2018. Meter readings will continue to be estimated until an actual meter replacement reading is received.

ICPs with missing reads are checked twice weekly. If possible, a reading for a nearby date will be retrieved from the AMI data and loaded into PEBS, otherwise a fault will be raised with the MEP. I reviewed these checks, and saw evidence of issues being resolved and field services jobs being raised through this process.

WISE provided a list of 19 ICPs not read during the period of supply. 13 of these were supplied for less than 30 days. All six ICPs not read during the period of supply where the period of supply was over 30 days were reviewed. All had legacy meters, and switched out before WISE replaced the meter. Exceptional circumstances did not exist, and not obtaining a read during the period of supply for some ICPs is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.8 With: Clause 7(1) and (2) Schedule 15.2 From: 01-Apr-17 To: 04-Jan-18	Six ICPs did not have an actual read recorded during the period of supply, and exceptional circumstances did not exist. Potential impact: Low Actual impact: Low Audit history: Three times previously Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	Controls are rated as moderate because they will mitigate the risk most of the time, because only one ICP does not have AMI metering installed. ICPs may remain unread where they are supplied for a short period, and do not have AMI metering. The impact is assessed as low, because in all cases, the ICPs were domestic customers, and consumption was estimated.

Actions taken to resolve the issue	Completion date	Remedial action status
PEBS generate a report Daily and Weekly identifying no Actual Reads / This is generally only evident in legacy meters or no communication from smart meters	Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur	Completion date	
PEBS generate a report Daily and Weekly identifying no Actual Reads / This is generally only evident in legacy meters or no communication from smart meters	Ongoing	

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 process to manage missed reads was reviewed.

Monthly meter reading frequency reports for the months of August to November 2017 were provided. All 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.

Four meter reading frequency report submissions were reviewed to determine whether they were made on time.

Audit commentary

Read attainment processes are discussed in **section 6.8**.

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
August 2017	20	4	5	99.5%
September 2017	20	3	4	99.7%
October 2017	21	0	0	100.0%

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
November 2017	20	0	0	100.0%

WISE provided a list of ICPs unread for more than 12 months. In all cases WISE could demonstrate that exceptional circumstances existed; the ICPs were either vacant, demolished, or decommissioned.

I reviewed meter reading reports for July to November 2017, which confirmed that they met the meter reading frequency report requirements and were submitted on time.

Audit outcome

Compliant

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

Code reference

Clause 9(1) and (2) Schedule 15.2

Code related audit information

In relation to each NSP, each reconciliation participant must ensure that for each NHH ICP at which the reconciliation participant trades continuously for each 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 process to manage missed reads was reviewed.

Monthly meter reading frequency reports for the months of August to November 2017 were provided. NSPs with less than 90% of ICPs read in the previous four months on these reports were reviewed to determine whether reasonable endeavours were used to attain reads, and if exceptional circumstances existed.

Audit commentary

Read attainment processes are discussed in **section 6.8**.

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	Total ICPs unread for 4 months	Overall percentage read
August 2017	30	1	16	99.1%
September 2017	30	1	13	99.3%

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	Total ICPs unread for 4 months	Overall percentage read
October 2017	30	1	9	99.5%
November 2017	30	1	8	99.5%

Unread ICPs on the NSPs where less than 90% read attainment was achieved were reviewed. In all cases WISE could demonstrate that exceptional circumstances existed.

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

HHR data is provided by AMS, Metrix, and WEL Networks as MEPs.

Audit commentary

AMS, Metrix, and WEL Networks are responsible for NHH meter interrogation logs, and this is reviewed as part of their MEP 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

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

Code reference

Clause 18 Schedule 15.2

Code related audit information

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

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

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

Audit observation

Processes to archive and store raw meter data were reviewed. The oldest raw meter data available was viewed, to confirm it is retained.

I traced readings for 15 ICPs from the source data to PEBS.

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

Audit commentary

WISE intends to retain meter reading data for over 48 months. I viewed the meter readings for WISE's first ICP (0258253088LCBBE) and found that the switch reading from 10/11/2015 was recorded in PEBS.

I traced readings for five ICPs each for AMS, Metrix, and WEL Networks from the source data to PEBS. All reads matched the source data. This confirmed that the reads had not been modified.

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

Audit outcome

Compliant

7.3. Non-metering information collected / archived (Clause 21(5) Schedule 15.2)

Code reference

Clause 21(5) Schedule 15.2

Code related audit information

All relevant non-metering information, such as external control equipment operation logs, used in the determination of profile data must be collected, and archived in accordance with clause 18.

Audit observation

Processes to record non-metering information were discussed.

Audit commentary

No non-metering information is collected by WISE.

Audit outcome

Compliant

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

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

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

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

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

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

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

Audit observation

Processes for the correction of NHH meter readings were reviewed.

Audit commentary

Where errors are detected during the validation process, WISE may review AMI readings for surrounding dates. If an original meter reading cannot be confirmed by another reading, the original read is invalidated so it will not be used for billing or reconciliation. An estimated reading is used for billing and forward estimate is created for reconciliation. If actual readings become available later, the estimated readings are replaced, and I observed this process during the audit.

I reviewed six examples of stopped or defective meters.

- Five ICPs had meters with intermittent communications issues. Consumption was estimated, and replaced with actual readings once communication was restored.
- One ICP had a blown meter reported by the customer. The meter was replaced, and an estimated closing read was applied, because an actual reading could not be obtained from the meter.

Five examples of possible bridged meters were reviewed, these are typically identified through consumption validations or when the MEP notifies WISE of load side voltage. WISE rarely completes manual disconnections, bridging only occurs where an ICP cannot be remotely reconnected. WISE does not normally estimate consumption during the bridged period.

- For two examples, the bridged period occurred after the ICP switched to a new retailer.
- For ICPs 0000191774WEBFA, 0446349038LCF7B and 0286597586LC4A4 the meters were bridged for 6, 9 and 107 days respectively, and no corrections were processed. This is recorded as non-compliance below.

Consumption while disconnected is identified and reported. Usually vacant disconnections occur the day the customer account is finalised. Consumption on disconnected ICPs is monitored weekly. Where ICPs are disconnected, reads are imported into PEBS but not loaded onto the customer's account, unless a meter is changed, consumption is occurring, or the ICP is switching out. Any disconnected ICPs found to be consuming energy are checked, and disconnected again, unless a switch is underway.

Consumption while disconnected that is recorded against a customer's account will be reported in the AV080 submission. I did not identify any instances where consumption while disconnected had occurred and had not been recorded against the customer's account.

In some cases, actual readings are not used when they are available:

- If the read is lower than the previous reading, a rollover reading is processed if the meter had rolled over, or a zero estimate is created if the read is found to be genuinely lower than a previous (usually estimated switch) reading. This is raised as non-compliance in **section 9.5**.
- I found that in some circumstances, the reads applied in CS and RR files were not consistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date. This is recorded as non-compliance in **section 4.16**.

No corrections for multiplier discrepancies were identified; none of WISE's ICPs have a multiplier flag of yes.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 8.1 With: Clause 19(1) Schedule 15.2 From: June 2017 To: November 2017	Three bridged meters have not had corrections processed. 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 that corrections are processed most of the time, except where they relate to bridged meters. Bridging only occurs where a soft reconnection cannot be performed after hours and the customer urgently requires their energy supply for health and safety reasons.		
Actions taken to resolve the issue		Completion date	Remedial action status
PEBS generate a daily, weekly report monitoring the zero estimates. We are in the process of including the estimate reads for the bridged meters to reflect in the customers reads		March 2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The above report and enhancements will minimize zero estimates.		March 2018	

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

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

Code reference

Clause 19(3) Schedule 15.2

Code related audit information

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

Audit observation

The registry list for 1 April 2017 to 4 January 2018 was reviewed.

Audit commentary

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

Audit outcome

Not applicable

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

Code reference

Clause 22(1) and (2) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Corrections are discussed in **section 8.1**, which confirmed that raw meter data is not overwritten as part of the correction process. Audit trails are discussed in **section 2.4**.

Raw meter data retention for MEPs was reviewed as part of their MEP audits.

Audit commentary

Raw meter data is held by MEPs.

WISE only corrects working data and keeps an appropriate audit trail.

Audit outcome

Compliant

9. ESTIMATING AND VALIDATING VOLUME INFORMATION

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

Code reference

Clause 3(3) Schedule 15.2

Code related audit information

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

Audit observation

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

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

Audit commentary

Readings are clearly identified in PEBS.

CS and RR files produced by PEBS record the read type as actual, and this must be manually changed to estimate if necessary prior to sending the files to the registry.

Read types were incorrectly recorded in four transfer CS files, one switch move CS file and two switch move RR files. A further nine switch move CS files had incorrect reads and read types recorded.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 9.1 With: Clause 3(3) Schedule 15.2 From: entire audit period	Read types were incorrectly recorded in 16 switch files. Potential impact: Medium Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are weak as they are not sufficient to ensure that read types are correctly recorded. The impact is assessed to be low, as in half the cases the read value was correct, lessening the impact of the error.		
Actions taken to resolve the issue		Completion date	Remedial action status
Change in process and staff training / also note additional notes under the Participant Response section		Ongoing	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
Staff training	Ongoing	

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

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

A sample of submission data was reviewed in **section 12**, to confirm that volume was based on readings as required.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

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

Audit observation

A sample of submission data was reviewed in **sections 2.3** and **12**, to confirm that volume was based on readings as required.

Audit commentary

The MEPs are responsible for data collection, and this is reviewed as part of their audit. The MEPs retain raw, unrounded data.

A sample of 15 reads were traced from the source files to PEBS in **section 2.3**. The source files contain the raw unrounded data. Reads from AMS and Metrix are rounded to the nearest whole number on import into PEBS, and reads from WEL Networks are truncated to remove decimal places.

Audit outcome

Compliant

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

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

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

Audit observation

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

I reviewed and observed the NHH data validation process, including checking a sample of data validations.

Audit commentary

All reads received are from AMI meters, from the MEP on meter exchange paperwork, or through the switching process. WISE supplies one ICP which does not currently have an AMI capable meter, which is in the process of being upgraded. Meter readings will continue to be estimated until an actual meter replacement reading is received.

The 2017 audit recommended some improvements to WISE's validation processes, and these have all been implemented.

I confirmed that the WISE's daily read import process checks:

- Readings relate to the correct ICP meter and register.
- The date and time is valid, and matches the expected date. The process only imports midnight reads, so if there is no midnight read available it will be recorded as a missing read.
- The ICP has an active customer account. If the customer account is terminated, a read will be imported, but recorded against the ICP and meter, not a customer's account.
- Whether the read is the same as, higher or lower than the previous read. If the read is the same or higher it is imported. If the read is lower, an exception is generated. A rollover reading is processed if the meter has rolled over, or a zero estimate is created if the read is found to be genuinely lower than a previous (usually estimated switch) reading. The creation of these zero estimates is recorded as non-compliance below. Where difference between the switch readings and subsequent actual readings is more than -200kWh, the read renegotiation process applies.

Further validations occur after reads are imported:

- Checks that the readings lie within the expected range are completed daily, and include ICPs with zero consumption. All exceptions are automatically emailed to the WISE team for investigation and resolution.
- Daily billing validations and credit reviews identify customers with high or low balances, which are investigated.
- Missing reads are checked twice weekly. If possible, a reading for a nearby date will be retrieved from the AMI data and loaded against the customer account in PEBS, or a fault will be raised with the MEP.
- Each ICP's daily average consumption for the previous week is checked twice each week. Any ICPs with daily average consumption outside the expected range are checked.

Reconciliation submissions are also reviewed prior to submission, this process is discussed in **section 12.3**.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 9.5 With: Clause 16 Schedule 15.2 From: 01-Apr-17 To: 04-Jan-18	Where a subsequent read is lower than the switch in reading, the negative consumption is zeroed out. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	Any read differences greater than 200 kWh are expected to be dealt with through the read renegotiation process. Once reads catch up to the switch read, all consumption will be accounted for.

Actions taken to resolve the issue	Completion date	Remedial action status
We developed a daily report at end of 2017 - PEBS generates this daily report showing differences greater than 70 KWh - Monitoring the daily reading	Dec 2017	Investigating
Preventative actions taken to ensure no further issues will occur	Completion date	
Through monitoring the daily reading and billing, any read differences greater than 200kWh will be dealt with through the read renegotiation process.	Dec 2017	

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Electronic read validation and meter event log processes were reviewed.

Audit commentary

Submission type is NHH for all ICPs, and data is validated as described in **section 9.5**.

Meter event reports are not reviewed, and are not received from Metrix. This is recorded as non-compliance below.

- Meter event information is provided via SFTP by AMS and WEL Networks.
- Metrix do not currently provide event reporting, but email information on certain events, including load side voltage, possible tampering, and meter changes. WISE actions these emails as they are received.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 9.6</p> <p>With: Clause 17 Schedule 15.2</p> <p>From: 01-Apr-17</p> <p>To: 04-Jan-18</p>	<p>AMI event information not adequately obtained and monitored.</p> <p>Event reporting is received from AMS and WEL Networks, but is not reviewed. Event reporting is not received from Metrix.</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 as they are insufficient to mitigate risk of non-compliance.</p> <p>The audit risk rating is low, as most events affecting meter accuracy would be detected through WISE's other validation processes.</p>	
Actions taken to resolve the issue		Completion date
The AMI event information will be downloaded and reviewed daily - now implemented		Feb 2018
Preventative actions taken to ensure no further issues will occur		Completion date
Event reporting from AMS and WEL networks will be downloaded and reviewed and request the event reporting from Metrix on a daily basis		Feb 2018
		Identified

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

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

Code reference

Clause 13.136

Code related audit information

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

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

Audit outcome

Not applicable

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

Code reference

Clause 13.137

Code related audit information

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

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

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

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

Audit outcome

Not applicable

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

Code reference

Clause 13.138

Code related audit information

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

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

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

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

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

Audit outcome

Not applicable

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

Code reference

Clause 13.140

Code related audit information

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

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

Audit outcome

Not applicable

11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

11.1. Buying and selling notifications (Clause 15.3)

Code reference

Clause 15.3

Code related audit information

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

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

Audit observation

A registry list was reviewed for the period from 1 April 2017 to 4 January 2018 to confirm the profiles used.

Audit commentary

WISE only uses RPS profile; this clause does not apply.

Audit outcome

Not applicable

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

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

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

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

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

Audit observation

The process for the calculation of ICP days was examined by checking six NSPs with a small number of ICPs to confirm the AV110 ICP days calculation was correct.

A registry list with history for the period from 1 April 2017 to 4 January 2018 was reviewed to determine whether there have been any upgrades from NHH to HHR, or downgrades from HHR to NHH; none were identified.

I reviewed variances for 12 months of GR100 reports.

Audit commentary

The process for the calculation of ICP days was examined by checking six NSPs with a small number of ICPs. ICP days calculation was confirmed to be correct.

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

The 2017 audit found inactive ICP days were being included in the AV110 submissions. This caused the higher difference for the initial and revision one submissions for December 2016. This issue was resolved in January 2017, and has been cleared for the entire audit period.

Month	Ri	R1	R3	R7
Dec 2016	-4.29%	-4.29%	-0.50%	-0.32%
Jan 2017	0.05%	-0.61%	-0.61%	0.04%
Feb 2017	-0.63%	-0.65%	-0.57%	0.09%
Mar 2017	-0.68%	-0.51%	-0.37%	0.14%
Apr 2017	-0.42%	-0.39%	-0.21%	0.25%
May 2017	-0.38%	-0.23%	0.25%	0.29%
Jun 2017	-0.29%	-0.28%	0.23%	-
Jul 2017	0.22%	0.14%	0.11%	-
Aug 2017	-0.02%	0.10%	-0.01%	-
Sep 2017	0.04%	0.10%	-0.08%	-
Oct 2017	0.02%	-0.23%	-	-
Nov 2017	-0.32%	-0.21%	-	-

Some status updates to active and inactive were not processed from the correct date, which resulted in some ICP days reporting discrepancies. This is recorded as non-compliance below and in **section 12.7**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.2 With: Clause 15.6 From: 01-Apr-17 To: 04-Jan-18	ICP days are not reported correctly where status updates are not processed with the correct date. 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 the process to generate and aggregate the reports is compliant. The impact is rated as low, ICP days may not be reported correctly where status changes are processed from an incorrect date. The net difference in ICP days is zero for the exceptions identified.		
Actions taken to resolve the issue		Completion date	Remedial action status
Changed our Process Nov 17 to reflect ICP status based on disconnection rather than Account termination		Nov 2017	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Changed our Process Nov 17 to reflect ICP status based on disconnection rather than Account termination		Nov 2017	

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

Code reference

Clause 15.7

Code related audit information

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

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

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

Audit observation

The process for the calculation of as billed volumes was examined by checking five NSPs with a small number of ICPs to confirm the AV120 calculation was correct.

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

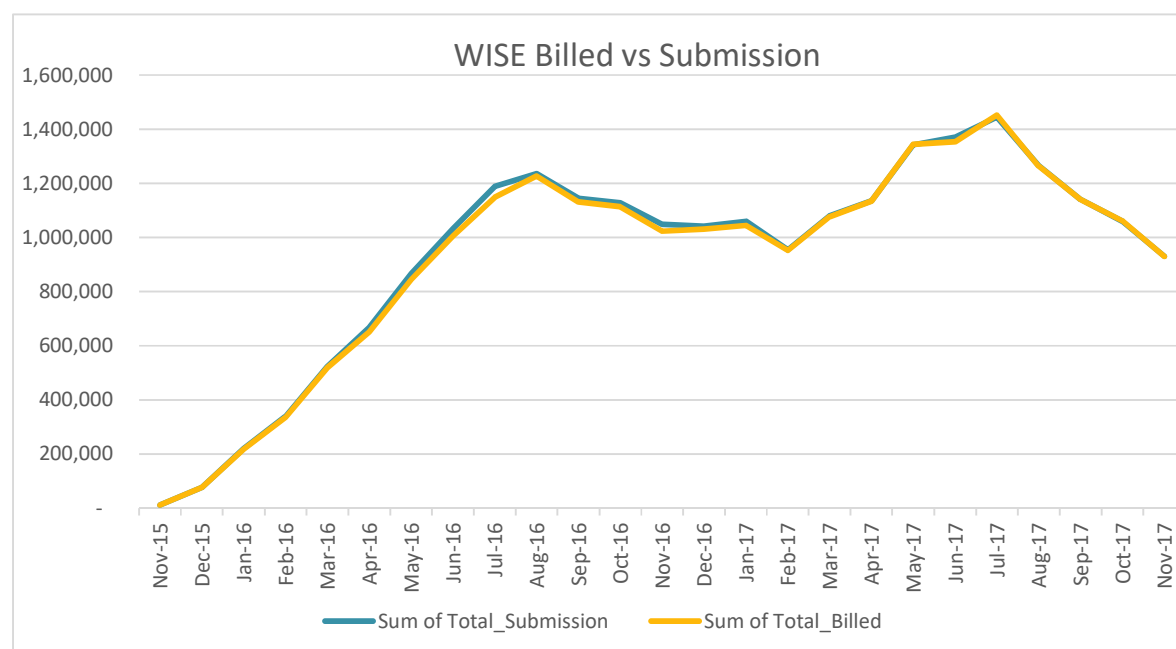
Audit commentary

The process for the calculation of as billed volumes was examined by checking five NSPs with a small number of ICPs against WISE's daily invoice information. The AV120 billed consumption calculation was confirmed to be correct for the NSPs checked.

I also checked the difference between submission and electricity supplied information for a 25 month period, and the results are shown and discussed in the chart below.

The total difference is -0.96% for the two years ended November 2017 and -0.30% for the year ended November 2017 (billed lower than submission).

Comparison between Submitted Volumes and Electricity Supplied



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

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

Review of a registry list for the period from 1 April 2017 to 4 January 2018 confirmed that WISE has not supplied any ICPs with submission type HHR.

Audit commentary

Compliance with these clauses was not assessed, because WISE does not deal with HHR readings.

Audit outcome

Not applicable

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

The accuracy of submissions is discussed in **section 12.7**.

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

Audit commentary

There was one alleged breach for late provision of information; alleged breach 1705WISE1 related to failure to submit revised submission information to the reconciliation manager by 4pm on the 13th business day in May 2017. This was raised as non-compliance during the 2017 audit.

Audit outcome

Compliant

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

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

The process to ensure that AV080 submissions are accurate was discussed. The process for aggregating the AV080 was examined by checking ten NSPs with a small number of ICPs.

The GR170 to AV080 files for five months were compared, to confirm zeroing occurs.

Audit commentary

The process for the calculation of NHH volumes was examined by checking ten NSPs with a small number of ICPs. NHH volume calculation was confirmed to be correct.

GR170 and AV080 files for September 2016 (14 month), March 2017 (7 month), April 2017 (7 month), May 2017 (7 month) and August 2017 (3 month) were compared, and found to contain the same NSPs, confirming that zeroing is occurring as required.

I checked from the registry list file with history against the AV080 detailed file for September 2017, and confirmed all ICPs that WISE was responsible for during the month were reported. WISE rarely supplies active-vacant ICPs, their policy is to disconnect as soon as an ICP becomes vacant.

Reads for disconnected ICPs are entered into PEBS against the ICP and meter, but not recorded against the customer. Zero consumption is normally expected for disconnected ICPs, but if consumption occurs during the disconnected period it will be identified and reported. This is discussed further in **section 8.1**.

AV080 submissions are reviewed by WISE prior to being submitted, including checks for high consumption. Other validation checks are discussed in **section 9.5**.

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 NSP table on the registry and registry list were reviewed.

Audit commentary

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

Audit outcome

Not applicable

12.5. Provision of NSP submission information (Clause 15.10)

Code reference

Clause 15.10

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

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

Audit outcome

Not applicable

12.6. Grid connected generation (Clause 15.11)

Code reference

Clause 15.11

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

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

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

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

Audit observation

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

Audit commentary

There was one alleged breach for late provision of information; alleged breach 1705WISE1 related to failure to submit revised submission information to the reconciliation manager by 4pm on the 13th business day in May 2017. This was raised as non-compliance during the 2017 audit, and no late submissions have occurred since then.

Some submission accuracy issues were identified, and are recorded as non-compliance below.

Inaccurate switch readings

In some cases, switch readings were inconsistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date. While WISE had applied the agreed readings when calculating reconciliation submission volumes, the readings were incorrect resulting in inaccurate submissions in some cases.

The read type issues identified in **sections 4.3, 4.10 and 4.11** have no impact on reconciliation. The read types are correctly recorded in PEBS, and the reads are considered permanent estimates and applied when calculating historic estimate.

Inaccurate status changes

Where a status change is not processed from the correct date, ICP days will not be reported correctly. The net difference in ICP days is zero for the exceptions identified. This is discussed further in **section 2.1**.

Bridged meters

Consumption is not estimated for bridged meters. Three bridged meters did not have corrections processed, as discussed in **section 8.1**.

Inactive consumption where disconnection and reconnection reads are not recorded

Where ICPs are inactive for part of a period, historic estimate reported may be incorrect in certain circumstances. Incorrect submission may occur where actual or permanent estimate reads are not recorded on the disconnection or reconnection date.

PEBS correctly calculates historic estimate for the active period, and then adds a new record for the inactive consumption. This inactive consumption is reported the difference between the first read following reconnection and the last read before disconnection. Historic estimate is calculated correctly where disconnection and reconnection reads are entered. If the last actual read before disconnection occurs prior to the disconnection date, or first actual read after reconnection occurs after the reconnection date, the consumption between the reconnection date and first actual reading and/or consumption between the last actual reading and disconnection date will be double counted because it is included in the active period, and the inactive period.

For example, ICP 0000022035WE29D was inactive 12/09/17 to 20/09/2017, with readings recorded on 31/08/17, 11/09/17, 17/09/17, 25/09/17 and 01/10/17. For September 2017:

- Historic estimate is correctly calculated for the active periods from 01 to 11/09/17, and 21 to 30/09/17.
- Consumption for the inactive period is calculated as the difference between the readings on 11/09/17 and 25/09/17. The consumption from 22/09 to 25/09 is already included in the historic estimate calculation for the active period, and is double counted.

WISE intends to ensure that this scenario is handled correctly by always entering actual or permanent estimate disconnection and reconnection reads.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 12.7</p> <p>With: Clause 15.12</p> <p>From: 01-Apr-17</p> <p>To: 04-Jan-18</p>	<p>If permanent estimate readings do not reflect the best estimate of consumption, historic estimate may not be correct.</p> <p>Where status changes are not processed from the correct date, ICP days may not be reported correctly.</p> <p>Historic estimate for consumption while inactive may not be calculated correctly if actual or permanent estimate reads are not recorded on the disconnection and reconnection date.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate, because the calculations are correct, and in most cases the readings and status dates used by the calculations were also correct. The issue relates to the accuracy of some data input into the submission calculations.</p> <p>The overall impact is difficult to quantify, but for the sample checked was found to be low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
This was identified during audit process and we have recently (Feb 18) added an additional process to ensure that actual or permanent estimated reading is on the disconnection and reconnection date when updating the registry		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This was identified during audit process and we have recently (Feb 18) added an additional process to ensure that actual or permanent estimated reading is on the disconnection and reconnection date when updating the registry		Ongoing	

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

AV080 14 month revisions were reviewed to identify any forward estimate still existing.

Audit commentary

Review of AV080 14 month revisions August, September, and October 2016 showed no forward estimate remained.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.3

Code related audit information

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

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

Audit observation

Aggregation and content of reconciliation submissions was reviewed.

Audit commentary

Compliance with this clause was assessed:

- all WISE's ICPs have metering category 1, and are submitted as NHH
- no ICPs with unmetered load are supplied
- no profiles requiring a certified control device are used
- no loss or compensation arrangements are required
- aggregation of the AV080 reports is compliant.

Audit outcome

Compliant

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

Code reference

Clause 3 Schedule 15.3

Code related audit information

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

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

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

Audit observation

Review seven 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

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

Audit outcome

Compliant

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

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

Audit commentary

The accuracy of historic estimate calculations has improved since the 2017 audit. For almost all examples provided the historic estimate calculations were accurate, and the correct Seasonal Adjusted Shape Values (SASV) were applied.

The 2017 audit non-compliances for ICPs which had switched out and back in, or had been inactive for part of the period were followed up, and found to be resolved.

I found that for scenario C, where the ICP is inactive for part of the period, disconnection and reconnection reads had not been entered for ICP 0000022035WE29D. While the historic estimate calculation was correct, the result was not because readings were not recorded as required. This is raised as non-compliance in **section 12.7**. WISE intends to ensure that this scenario is handled correctly by always entering actual or permanent estimate disconnection and reconnection reads.

Test	Scenario	Test Expectation	Result
a	ICP becomes Active part way through a month	Consumption is only calculated for the Active portion of the month.	Compliant
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Compliant
c	ICP become Inactive then Active again within a month.	Consumption is only calculated for the Active portion of the month.	Compliant
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Compliant
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Compliant
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day.	Compliant

Test	Scenario	Test Expectation	Result
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.	Has not occurred
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Has not occurred
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.	Has not occurred
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.	Has not occurred

Audit outcome

Compliant

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 Schedule 15.3

Code related audit information

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

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

Audit observation

The process to create forward estimates was reviewed.

Forward estimates were checked for accuracy by analysing the GR170 file for variances between revisions over the audit period.

Audit commentary

WISE's forward estimate process is based on estimated reads entered in PEBS. The estimated reads are calculated from the average daily consumption, which is based on actual read history. If no historical information is available, the average daily consumption from the CS file, or information provided by the customer on sign up is used.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within 15% and within 100,000kWh. The target was met for all balancing areas.

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

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
Jul 2016	0	0	0	0	3
Aug 2016	0	0	0	0	3
Sep 2016	0	0	0	0	3
Oct 2016	0	0	0	-	4
Nov 2016	0	0	0	-	4
Feb 2017	0	0	0	-	7
Mar 2017	0	0	0	-	8
April 2017	0	0	0	-	8
May 2017	0	0	0	-	8
June 2017	0	0	-	-	8
July 2017	0	0	-	-	7
Aug 2017	0	0	-	-	7

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

Month	Revision 1	Revision 3	Revision 7	Revision 14
Jul 2016	-1.06%	-0.46%	-0.85%	-2.72%

Month	Revision 1	Revision 3	Revision 7	Revision 14
Aug 2016	0.16%	0.32%	-0.31%	0.04%
Sep 2016	-1.04%	0.58%	0.20%	0.05%
Oct 2016	0.51%	0.41%	0.94%	-
Nov 2016	1.96%	2.67%	1.60%	-
Feb 2017	1.29%	1.50%	-0.14%	-
Mar 2017	-2.49%	-1.35%	-0.13%	-
April 2017	-0.23%	-1.09%	0.39%	-
May 2017	-0.99%	-0.56%	1.09%	-
June 2017	-2.37%	0.22%	-	-
July 2017	-0.35%	1.54%	-	-
Aug 2017	-0.09%	1.29%	-	-

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 15.3

Code related audit information

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

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

Audit observation

The registry list for 1 April 2017 to 4 January 2018 was reviewed, to identify any ICPs which have had a change of profile.

Audit commentary

Examination of the list file found that WISE has only used the RPS profile; compliance was not assessed.

Audit outcome

Not applicable

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

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

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

Audit observation

The process to ensure that AV080 submissions are accurate was discussed in **section 12.2**.

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

Zeroing in the AV080 submission is discussed in **section 12.3** and was found to be compliant.

Audit commentary

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

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

The AV080 NHH volumes aggregation process was examined by checking five NSPs with a small number of ICPs each. The AV110 ICP days aggregation process was examined by checking six NSPs with a small number of ICPs each. The aggregation was confirmed to be correct.

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

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

I reviewed the rounding of data on the AV080 reports as part of the aggregation checks.

Audit commentary

Review of nine AV080 reports confirmed that submission information is appropriately rounded to two decimal places.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

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

I reviewed nine months of AV080 reports to determine whether historic estimate requirements were met.

Audit commentary

The quantity of historical estimates is contained in the submission file and is not a separate report. The proportion of HE in the revision files was checked for nine separate months, and the table below shows that compliance has not been achieved in all instances. This proportion of HE at an aggregate level, as shown in the "proportion of HE at an aggregate level" table is high.

Quantity of NSPs where revision targets were met

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Aug 2016	-	-	22	22
Sep 2016	-	-	21	21
Oct 2016	-	-	22	22
Mar 2017	-	31	-	31
Apr 2017	-	31	-	31
May 2017	-	32	-	32
Jul 2017	30	-	-	30
Aug 2017	31	-	-	31
Sep 2017	31	-	-	31

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

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Aug 2016	-	-	100.0%
Sep 2016	-	-	100.0%
Oct 2016	-	-	100.0%
Mar 2017	-	100.0%	-
Apr 2017	-	100.0%	-
May 2017	-	100.0%	-
Jul 2017	99.9%		
Aug 2017	99.9%	-	-

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Sep 2017	100.0%	-	-

Audit outcome

Compliant

CONCLUSION

WISE Pre Pay Energy Limited (WISE) are a solely pre-payment participant. WISE have made considerable effort to improve their processes since the 2017 audit.

In most cases, the meter readings used in the switching process are validated meter readings or permanent estimates. Some issues with switch reads remain, and most of the non-compliances raised in the audit relate to this. I found that in certain circumstances, the reads applied in CS and RR files were not consistent with the AMI read for the switch date, and were not a reasonable estimate of the reading on the event date.

Application of switch readings has been discussed with WISE, including that the reading must reflect the actual reading or be the best estimate of the reading on the event date, regardless of who the customer wishes to be billed by, or whether WISE has an active customer at the address. The setting of event dates and withdrawal processes should be used to meet the customer's requirements, rather than amending readings.

Corrections also require some improvement. Corrections for bridged meters are still not completed, but I saw evidence of other corrections being processed. Bridging occurs rarely, as almost all reconnections are remote.

Many improvements have been made since the 2017 audit, and all recommendations have been implemented:

- there has been an improvement in the timeliness of registry update
- audit trails are now compliant
- estimated readings are replaced with actual readings if they become available later
- the ICP days report has been corrected, and now excludes inactive days
- all reconciliation submissions have been on time
- inactive consumption is identified and reported
- historic estimate calculation issues are resolved
- WISE now only supplies one non AMI meter, which is in the process of being upgraded to AMI.

The audit found 20 non-compliances. The breach risk rating total is 48, which gives an indicative next audit due date of six months.

WISE's comments indicate that they will act to prevent recurrence of the non-compliances identified during the audit. WISE understands they must to comply with the code, even if it results in costs being incurred which cannot be recovered from the customer. Improvements have been made between the time of the audit and the report being finalised, which are expected to dramatically improve WISE's compliance for switching.

Taking this into account, I recommend that the next audit should be carried out in 10 months, to allow time for the changes to be implanted and WISE to demonstrate they are consistently operating as intended.

PARTICIPANT RESPONSE

Please find below our comments around the audit non compliance

3.3 Changes to registry information (Clause 10 Schedule 11.1)

Decommissions

In cases of decommissions, retailers are usually the last to be informed. We raise decommission jobs based on emails received from either the MEP or the Network. The dates they are updated is based on the job completion notification or emails requesting registry update from MEPs and Networks.

MEP Nominations

MEP nominations are done similar to decommission updates, based on the date requested by the MEP. The dates the MEPS are nominated are usually the dates the MEPs have requested as the date they want to be nominated.

Late Updates to Active Status

The active status dates are updated based on the dates the ICPs switched to WISE. In most cases, if the switch is backdated we are obliged to update the registry as active from the back date we gained the site, which leads to non compliance.

Late Updates to Inactive Status

WISE used to update inactive status based on the date of termination of a customer account. That process has since been changed in mid November 2017. Now the registry is updated with the date after the actual disconnection happens. This helps us update the registry once we receive confirmation of the disconnection reducing the late updates to the registry significantly.

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

As explained in the Section 3.3 the Active updates to registry depends on the date with which the ICP switches to WISE. We have weekly reports to check for registry mismatch which helps us update the registry on time.

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

The AN date was updated the maximum time it could take for the switch to happen. This was done so to accommodate enough time to reach our customers and find out how they would like to go ahead with the switch.

Unlike post paid companies, our customers pay for their power ahead of using it. Hence it leaves them with an option to either get it refunded or finish it before being switched. We were still able to switch over 66% of ICPs, in 5 days or less based on how soon we could reach our customer or the current account status.

The actual transfer date used was also close to the requested date on the NT received in almost all the cases, but always less than the maximum period allowed.

Process Change

We have since changed this process, so the AN date reflects a more appropriate date the ICP might be transferred over based on the current status of account or the date requested in NT, whichever is closer to the probable CS date.

By doing so, we are now able to be compliant on the event dates being less than 5 working days for almost all our switching ICPs.

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

As mentioned in the previous section 4.2, the CS files standard switch is based on our customer's request. Unlike post paid customers where they are sent a bill on a later date, our customers make payments in advance. So we have to consider our customer's input on what they want to do with the payment when they wish to switch out.

Also in some cases we receive an NT on a certain date with the requested date a few days earlier than the actual date we received it. In these cases we still require the time to sort out an account with our customer, which takes the usual time but as a whole looks like it took longer.

The CS file reads were updated with wrong read type to avoid customers trying to get rid of bills. When customers with backdated bills switch in to WISE they immediately look to change power companies to get rid of the bill. Since we do not have a contract period this becomes an issue. They advise WISE that they want to pay the bill with some other retailer and request to be switched out.

Once they are switched they, claim they made no such arrangements and advise the new retailer to send back the bill. If we send a read as estimated they state the EA Guidelines to change to an event date read to change the gain read. Hence we sent reads as actual to show that it is a back dated bill requested by the customer.

Process Change

We have reduced the switching time for all requests to 5 working days, which significantly influences the late CS files.

As for the read types we now send the correct read type for all CS files. To reduce the customers using this loophole in the registry to get away with bills we have stopped signing up customers with bills with their old retailer.

If the ICP is vacant the latest reads for the requested transfer date is now used for switching.

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

As mentioned in the section 4.3, the Read Change was rejected since our customer advised; they wanted to make payment arrangements with their new retailers for the backdated bills received by WISE. However, once they were switched, they requested their new retailers telling they didn't owe any money to WISE and asked for Read change.

Process Change

The process change applied to 4.3 will reduce the number of customers misusing this, but not completely. We believe the differences between Prepay and Post pay needs to be acknowledged by EA. As a prepay solution we look to help vulnerable customers get power supply, however the difference between the two makes it hard for us to help provide power to these customers, since we have to turn them down.

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

It was explained in the section 4.3 why the previous process was carried out and how the CS dates were still under required 5 day period unless customer requested for staying longer with WISE.

Process Change

We have since changed the process as explained in the previous sections, to reflect the Actual Reads received for an ICP. All actual reads are now recorded in the account and the Actual Read or the best possible Estimate available for the Actual transfer date is now used for the switch.

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

In some cases where legacy meters are involved we do not get remote actual reads. And we have to arrange for access from our customer before we can replace the meter and obtain actual reads. Sometimes this process takes a while since arranging a time that suits our customer is hard.

This is also the case with smart meters with communication issues. Unless we have reconnected a property manually and are getting actual reads regularly it takes some time to find out if the switch reads received are matching our customer's usage.

A process of training the staffs to better handle these situations has always been in place to reduce these late RRs as much as possible.

4.16 Metering information (Clause 21 Schedule 11.3)

Process Change

The process carried out previously of using Actual Reads in place of Estimates was explained in the section 4.3. This process has now been changed to reflect the correct read types available on the day of the switch. The actual reads or the best possible estimate is now used as explained in section 4.3 and 4.10.

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

Process changes in the section 4 is made such that, the correct reads and read types are used. On top of that staff provided with extra training to check for the correct reads and read types before confirming a switch.

11.2 Calculation of ICP days (Clause 15.6)

Process changes done to section 3.3 where, the inactive status is updated based on the disconnection date and the active dates are updated based on the switch dates or reconnection dates has been implemented. This makes sure that the ICP days are calculated more accurately.

As you can see the non compliance was due to just 2-3 processes. They have since been changed to impact and reduce the non compliance as explained above.