

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT



For

FLICK ENERGY LIMITED

Prepared by: Tara Gannon

Date audit commenced: 15 November 2018

Date audit report completed: 3 December 2018

Audit report due date: 19 January 2019

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EXECUTIVE SUMMARY

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Flick Energy Limited (**Flick**), 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.

There have been several changes during the audit period:

1. Flick replaced the Data Repository with Telemetry in April 2018, which has resulted in many improvements including automated application of meter multipliers. Flick intends to automate some switching processes in Telemetry, and CS automation is currently being tested.

This audit has considered both systems and the whole audit period, with a focus on Telemetry when assessing the adequacy of controls and processes in place.

2. The Authority has approved Flick to apply the HHY profile and HHR submission type for NHH non-AMI meters which will be promptly upgraded to HHR or AMI meters. Flick uses the switch event reading and meter removal read from the NHH meter to quantify consumption for the NHH period.

While Flick endeavours to ensure that the customer wants to remain with Flick, and that the meter upgrade will be able to be completed, in some cases the ICP switches out before the upgrade is complete. Where this occurs, Flick uses the customer's photo read and switch in read to calculate an estimated switch out read.

The upgrade process has caused some compliance issues for Flick, relating to incorrect submission types and profiles being recorded on the registry, read attainment during the period of supply, read validation, and CS file content. A small number of ICPs are affected by these issues; less than 50 NHH non-AMI meters have been supplied during the audit period. Upon becoming aware of these issues, Flick stopped accepting NHH non-AMI ICPs and will resume the process once compliant procedures are in place.

3. Flick has implemented an internal audit regime; switching, registry and field services, and reconciliation internal audits have been carried out over the past year. Through these audits, improvements have been identified and implemented. The frequency of follow up internal audits are scheduled based on the findings of each audit.

Flick has continued to improve their registry validation processes and have worked hard to ensure that all connected and reconnected meters were appropriately certified.

Significant effort has been put into cleansing ANZSIC codes since the previous audit, and many of the late registry updates related to corrections.

Application of readings where agreed switch readings differ from actual AMI data continues to be an issue for Flick. Telemetry does not allow actual AMI meter readings to be replaced, which makes applying agreed switch readings which differ from AMI readings difficult in some cases. In addition, where differences between switch reads and AMI data are less than ± 5 kW or confirmed more than five business days after switch in reads, are not normally renegotiated and Flick applies their AMI data for reconciliation.

The difference between as billed and submitted volumes continues to be larger than expected. Flick has confirmed that their as billed reports contain some inaccurate data, and a replacement report is currently being tested. A material change audit is scheduled to be completed before the new report is implemented.

The audit found 27 non-compliance issues, two recommendations are made, and no issues are raised. The audit risk rating is 46, indicating that the next audit be due in six months. Taking into consideration Flick's comments, and that:

- Internal audit processes have been implemented, and a full cycle of audits have been completed this year. Opportunities for improvement have been identified and are being followed through.
- Several non-compliances are cleared, or in the process of being cleared, including all instances of incorrect registry information.
- System changes to improve compliance are underway including automation of switching processes, and replacement of the AV120 report.
- Several non-compliances relate to the small number of ICPs which where meters were upgraded from NHH non-AMI to HHR or AMI. Flick took action to prevent further non-compliance relating to NHH non-AMI ICPs, by not accepting NHH non-AMI ICPs until compliant procedures are in place.
- Four non-compliances have been cleared, and corrective actions are being investigated for two very minor non-compliances. The remaining non-compliances had corrective actions identified and underway prior to the audit report being finalised.

I recommend that the next audit is completed in 12 months, to allow Flick time to fully implement their corrective actions and demonstrate improved compliance.

The matters raised are shown in the tables below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	46 ICPs had incorrect profiles assigned and 44 ICPs had incorrect submission types assigned for NHH periods submitted as HHR using the HHY profile. Three ICPs had incorrect statuses recorded on the registry for some days. The data was corrected during the audit.	Strong	Low	1	Cleared
Arrangements for metering equipment provision	2.13	10.36	No MEP arrangements are in place with Delta, LMGL, or Trustpower.	Strong	Low	1	Identified
Changes to registry information	3.3	10 Schedule 11.1	79 late status updates. 76 late MEP nominations. 95 late trader updates.	Moderate	Low	2	Identified
Provision of information to the registry manager	3.5	Clause 9 Schedule 11.1	Four late status updates for new connections.	Moderate	Low	2	Identified
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	Incorrect ANZSIC codes were recorded on the registry for seven ICPs.	Strong	Low	1	Cleared
Management of "inactive" status	3.9	19 Schedule 11.1	Three ICPs were incorrectly recorded as inactive on the registry when they were active. All have since been corrected.	Strong	Low	1	Cleared
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	Nine transfer switches had incorrect AN response codes applied.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Losing trader must provide final information - standard switch	4.3	5 Schedule 11	Four late CS files for transfer switches. Some incorrect CS content.	Moderate	Low	2	Identified
Retailers must use same reading - standard switch	4.4	6(1) and 6A Schedule 11.3	One late RR file. One RR file contained an incorrect reading. 14 ICPs did not have the agreed switch reading recorded in Telemetry. One AC file was invalidly rejected.	Moderate	Medium	4	Identified
Gaining trader informs registry of switch request - switch move	4.7	9 Schedule 11.3	Two switch moves were requested more than two business days after pre-conditions were cleared.	Strong	Low	1	Identified
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	Four switch moves had incorrect AN response codes applied.	Moderate	Low	2	Identified
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	Two late switch move CS files. Some incorrect CS file content.	Moderate	Low	2	Identified
Gaining trader changes to switch meter reading - switch move	4.11	12 Schedule 11.3	Two late RR files. 13 ICPs did not have the agreed switch reading recorded in Telemetry.	Moderate	Medium	4	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	20 switch withdrawal requests were backdated greater than two months from the event date. Two switch withdrawal requests had incorrect advisory codes applied. One switch withdrawal request from another trader was rejected in error.	Strong	Low	1	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Metering information	4.16	21 Schedule 11.3	One incorrect CS read and one incorrect RR read were provided.	Moderate	Low	2	Identified
Maintaining shared unmetered load	5.1	11.14	No unmetered volumes were reported for two ICPs with unmetered load for part of the audit period.	Strong	Low	1	Identified
Electricity conveyed & notification by embedded generators	6.1	10.13 and clause 15.2	Energy is not metered and quantified according to the code where meters are bridged.	Strong	Low	1	Identified
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	Two photo readings were applied as actual readings in CS files, without being appropriately validated.	Moderate	Low	2	Identified
NHH meter reading application	6.7	6 Schedule 15.2	One incorrect CS read and one incorrect RR read were provided.	Moderate	Low	2	Identified
Interrogate meters once	6.8	7(1) and (2) Schedule 15.2	Two NHH metered ICPs did not have a validated read during the period of supply.	Strong	Low	1	Identified
Correction of HHR metering information	8.2	19(2) Schedule 15.2	A correction was not processed for the period ICP 0006891497RNC5D's meter was bridged.	Moderate	Low	2	Cleared. A correction has been processed.
Identification of readings	9.1	Clause 3(3) Schedule 15.2	Two photo readings were applied as actual readings in CS files, without being appropriately validated. One actual switch read was provided with a read type of estimated.	Moderate	Low	2	Identified
Buying and selling notifications	11.1	15.3	No trading notification was provided for HHY profile for BRB0331, MTO0331, MPE1101 or TQB0011.	Strong	Low	1	Investigating
Calculation of ICP days	11.2	15.6	ICP days are not provided for new ICPs until readings are entered after the switch in read.	Strong	Low	1	Investigating

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Electricity supplied information provision to the reconciliation manager	11.3	15.7	The AV120 report does not consistently reflect the quantity billed for the period.	Moderate	Low	2	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHR aggregates file does not contain electricity supplied information. Estimated submission data is not provided for new ICPs with no readings entered after the switch in read.	Strong	Low	1	Identified
Accuracy of submission information	12.7	15.12	Some submission information was incorrect, due to a correction not being processed, some volumes not being based on agreed switch readings, and not providing estimates where actual data was unavailable in some cases.	Moderate	Low	2	Identified
Future Risk Rating						46	

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
ICPs at new or ready status for 24 months	3.10	Monitoring of "new" and "ready" ICPs	A Registry List (type P) with proposed trader = FLCK and status = 000 and 999 should be run at least quarterly to identify ICPs which have been at "new" or "ready" status for more than 18 months and require follow up.

Retailers must use same reading - standard switch	4.4	Replacement of actual AMI readings	<p>Telemetry does not allow replacement of actual AMI data via its front end.</p> <p>In some cases, the agreed switch reading does not match the AMI data. Under the code, Flick is required to apply the agreed switch reading for reconciliation.</p> <p>I recommend that as part of its review and automation of the RR process, Flick considers how they could ensure that the agreed switch reading is consistently applied.</p>
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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

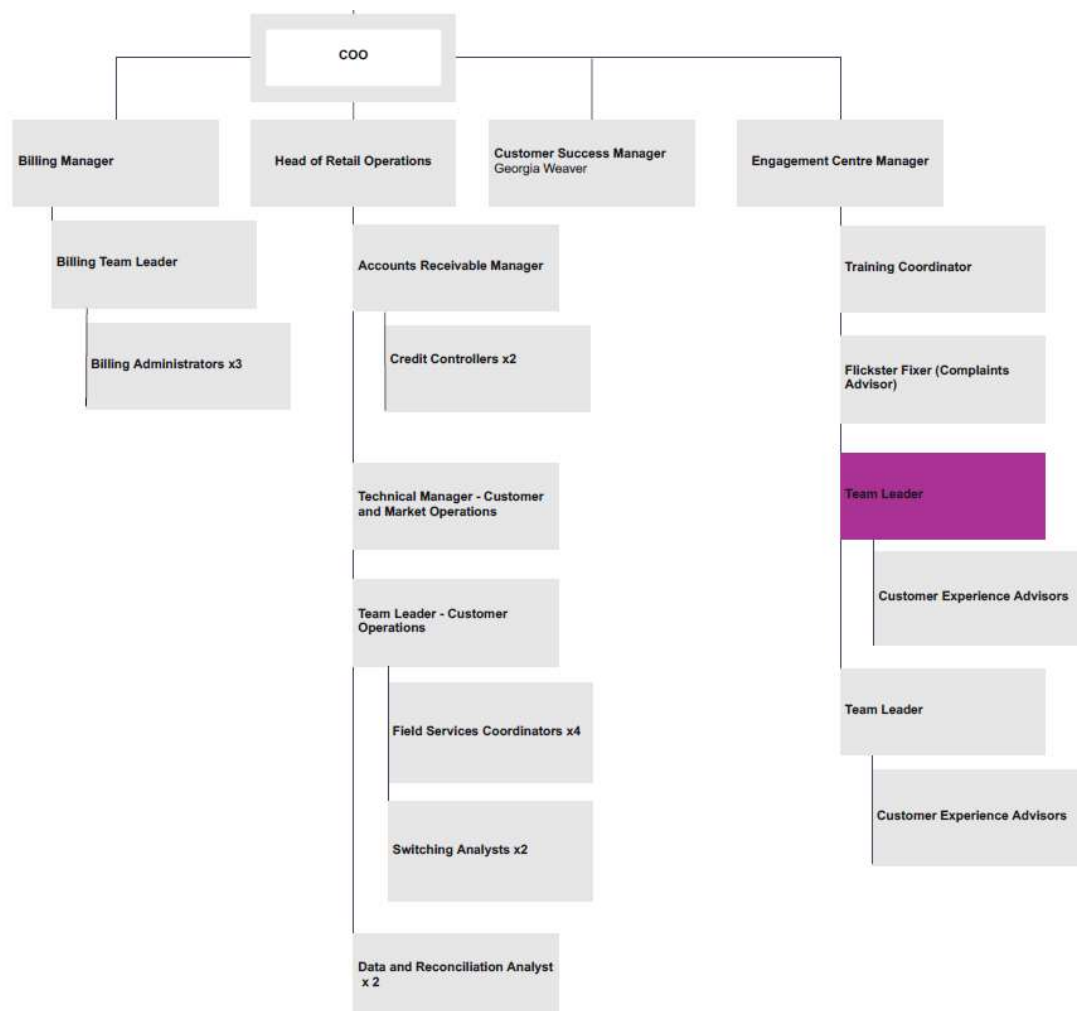
Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

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

1.2. Structure of Organisation

Flick provided a copy of their organisation structure for the relevant parts of their business.



1.3. Persons involved in this audit

Auditor:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Flick personnel assisting in this audit were:

Name	Title
Francis Guerin	Retail Operations Subject Matter Expert
James Leslie	Head of Retail Operations
Lucy Grant	Switching and Field Analyst
Malti Prasad	Compliance Manager – Customer and Market Operations
Maneesh Prasad	Senior Reconciliation Analyst
Wayne Paletasala	Customer Operations Team Leader
Zainal Ali	Switching and Field Analyst

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

Flick receives HHR data provided by AMS (for AMS and Smartco), Metrix (for Metrix and Counties Power), Arc, and FCLM as MEPs. There are no agents involved in the process.

Audit commentary

Not applicable

1.5. Hardware and Software

The table below lists the systems used to meet Flick's reconciliation participant obligations.

System/Provider	Function
AXOS	Billing system.
Data repository	Customer, registry, volume, and reconciliation information management until 31/03/18. Registry updates were processed manually.
Telemetry	Customer, registry, volume, and reconciliation information management from 01/04/18. Registry updates are processed manually. Automation of CS processes is being tested, with automation of RR and AC processes to follow.
SalesForce	Customer relationship management system which interfaces with the Admin App, Data Repository (until 31/03/18), Telemetry (from 01/04/18) and AXOS.
Umbrella	Secure, hosted data warehousing services including: <ul style="list-style-type: none"> • Data Warehousing • Server Back-ups • DR/BCP of Reconciliation Function systems, Customer Portal, Website, Choice App, Provisioning System (Dev, UAT, Prod environments) • Domain management services • Hot cutover between data warehousing locations (if required).

1.6. Breaches or Breach Allegations

There have been no alleged breaches relevant to the scope of this audit between November 2017 and September 2018.

1.7. ICP Data

Active ICPs are summarised by meter category in the table below.

Metering Category	2018	2017	2016	2015
1	24,665	21,973	15,071	5,445
2	33	36	16	1
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-

9	-	15	-	-
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Status	Number of ICPs (2018)	Number of ICPs (2017)	Number of ICPs (2016)	Number of ICPs (2015)
Active (2,0)	24,698	21,946	15,015	5,446
Inactive – new connection in progress (1,12)	-	-	-	-
Inactive – electrically disconnected vacant property (1,4)	34	13	4	12
Inactive – electrically disconnected remotely by AMI meter (1,7)	156	26	67	0
Inactive – electrically disconnected at pole fuse (1,8)	2	-	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	2	-	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	1	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	2	3	-	-
Inactive – reconciled elsewhere (1,5)	-	-	-	-
Decommissioned (3)	70	37	5	1

1.8. Authorisation Received

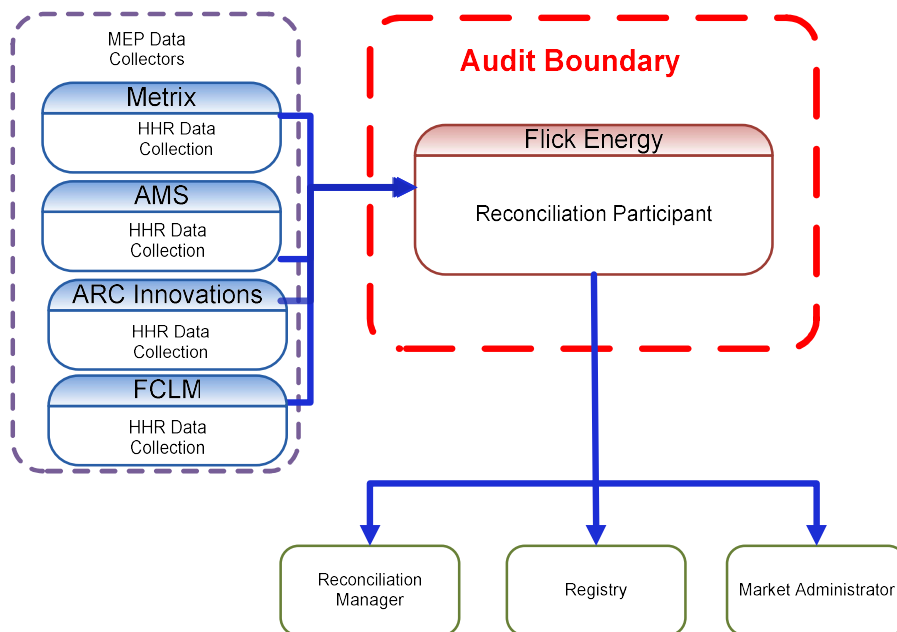
An emailed authorisation was received from Flick.

1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Flick, to support their application for renewal of certification in accordance with clauses 5 and 7 of schedule 15.1. The audit was conducted in accordance with the Guideline for Reconciliation Participant Audits V7.1.

The audit was carried out at Flick's premises in Wellington on 15-16 November 2018.

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



The table below shows the tasks under clause 15.38 of part 15 for which Flick requires certification. AMS, Arc, FCLM, and Metrix provide AMI data as MEPs, not as agents.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing AMI data
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) – Gathering and storing raw meter data		AMS – HHR (AMI) Arc – HHR (AMI) FCLM – HHR (AMI) Metrix – HHR (AMI)
(c)(i) - Creation and management of volume information		AMS – HHR (AMI) Arc – HHR (AMI) FCLM – HHR (AMI) Metrix – HHR (AMI)
(d) – Calculation of ICP days		
(da) - delivery of electricity supplied information under clause 15.7		

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing AMI data
(db) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8		
(e) – Provision of submission information for reconciliation		

1.10. Summary of previous audit

Flick provided a copy of their previous audit conducted in December 2017 by Tara Gannon of Veritek Limited. The summary tables below show the status of the non-compliances and recommendations raised in the previous audit. Further comment is made in the relevant sections of this report.

Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non compliance	Status
Relevant information	2.1	10.6, 11.2, 15.2	One ICP had an incorrect profile assigned.	Still existing
Changes to registry information	3.3	10 Schedule 11.1	152 late status updates.	Still existing
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	Incorrect ANZSIC codes were recorded on the registry for some business ICPs.	Still existing, but improved
AN files for standard switches	4.2	3 and 4 Schedule 11.3	Switch event dates were not within 10 business days after receipt of an NT file for five switches due to processing errors. The “AA” (accept and acknowledge) or “OC” (occupied premises) AN response codes were applied for four ICPs with advanced metering installed.	Cleared Still existing
Information for standard switches	4.3	5 Schedule 11.3	Nine late CS files for transfer switches. Incorrect average daily consumption was provided for one ICP.	Still existing
Read changes for standard switches	4.4	6(1) and 6A Schedule 11.3	Three RR files for transfer switches did not contain correct readings. For eight ICPs, the readings recorded in Flick’s Data Repository were inconsistent with the readings agreed with the other retailer.	Still existing

Subject	Section	Clause	Non compliance	Status
NHH read changes for HHR submission type	4.5	6(2) and (3) Schedule 11.3	Three RR files issued under clause 6.2 of schedule 11.3 did not contain correct readings.	Cleared
Information for switch moves	4.8	10(1) Schedule 11.3	Due to processing errors, switch event dates were earlier than the requested date for two switches. The “AA” (accept and acknowledge) AN response code was applied for two ICPs with advanced metering installed.	Cleared Still existing
Switch dates for switch moves	4.9	10(2) Schedule 11.3	Two ICPs had event dates set earlier than the gaining trader requested date.	Cleared.
Final information for switch moves	4.10	11 Schedule 11.3	At least one late switch move CS file. Incorrect average daily consumption was provided for one ICP.	Still existing
Read changes for switch moves	4.11	12 Schedule 11.3	One AC file was one day late. One RR file for a switch move did not contain correct readings. For six ICPs, the readings recorded in Flick’s Data Repository were inconsistent with the readings agreed with the other retailer.	Cleared Cleared Still existing
Switch withdrawals	4.15	17 and 18 Schedule 11.3	15 switch withdrawal requests were backdated greater than two months from the event date.	Still existing
Maintaining shared unmetered load	5.1	11.14	0005039797RN40C had shared unmetered load connected between 13/03/2017 and 26/04/2017, which was not reported by Flick. This resulted in under submission by 3.6 kWh.	Still existing
Electricity conveyed	6.1	10.13 and clause 15.2	Energy is not metered and quantified according to the code where meters are bridged.	Still existing
NHH reading application	6.7	6 Schedule 15.2	Four incorrect RR readings were provided.	Still existing

Subject	Section	Clause	Non compliance	Status
HHR corrections	8.2	19(2) Schedule 15.2	There is no procedure to estimate unrecorded consumption during bridged periods. A correction was not processed for the period ICP 1000755980UNFB5's meter was bridged.	Cleared, but some new issues were identified
ICP days	11.2	15.6	Inactive ICP days are included in the AV110 report, if an ICP is inactive and active during the month. AV110 data is not zeroed where Flick has previously submitted ICP days, but there are no ICP days reported in the current revision.	Cleared No recurrence during the audit period
HHR Aggregates	11.4	15.8	HHR aggregates file does not contain electricity supplied information.	Still existing
Accuracy of submission information	12.7	15.12	Some submission information was incorrect, due to a correction not being processed, some volumes not being based on agreed switch readings, and an inaccurate correction for multipliers.	Still existing

Subject	Section	Clause	Recommendation	Status
CS creation	4.10	Clause 11 Schedule 11.3	Automate the CS process to reduce the likelihood of late files, and inaccurate file content.	Underway, automation of the CS process is currently being tested.
Billed data	11.3	Clause 15.7	Monitor as billed versus submission volumes over the coming months. Investigate to confirm the reason for the variance between billed and submitted volumes.	Implemented, and testing of a new AV120 report is underway.

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 as at 25/09/18 was examined to identify any registry discrepancies, and confirm that all information was correct and not misleading.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

This clause requires that Flick must check the list file against their own records and correct records as soon as practicable. Flick imports the PR010 and PR030 files to capture any registry changes. Telemetry is updated based on these reports.

Flick has appropriate processes to address instances of incorrect data. Each Tuesday and Thursday, safety net reporting is used to identify and resolve data discrepancies, including:

- status discrepancies, including ICPs which have switched in but remain disconnected and a check against a list of disconnected ICPs
- any ICPs where daily unmetered kWh has been added
- any ICPs with an unexpected MEP, which are checked to ensure that a meter replacement is in progress
- unknown ANZSIC codes
- ICPs with generation fields populated, which are checked to ensure that generation metering is installed, and the generation fuel type is as expected
- invalid submission types and profiles
- invalid meter flags.

During the audit, I saw evidence that the safety net process was working successfully, and exceptions identified were followed up.

The Data Repository did not store compensation factors and a separate list was maintained and reconciled to the registry twice each month. Telemetry stores and automatically applies the compensation factors, this list is no longer required.

The registry list was examined to identify inaccurate data:

Issue	2018 Qty	2017 Qty	Comments
Blank ANZSIC codes	-	-	Compliant
ANZSIC "T99" series	-	-	Compliant
UML load = zero	-	-	Compliant
Incorrect UML load	-	-	Compliant
Shared unmetered load incorrect	-	-	Compliant
ICPs with Distributor unmetered load populated but retail unmetered load is blank and UML flag = N	-	-	Compliant
No MEP recorded or nominated and UML= "N"	-	-	Compliant
Incorrect status	3	-	Three ICPs were incorrectly recorded as inactive on the registry when they were active. All have since been corrected. Refer to section 3.9 .
Incorrect profile	46	1	HHR profile was invalidly recorded on the registry for 46 ICPs for periods without certified HHR metering. The HHY profile should have been applied for the NHH period. Flick corrected the profiles for the affected ICPs during the audit. Non-compliance is also recorded in section 12.7 for incorrect profile application for submission.
Incorrect submission type	44	-	NHH submission type was invalidly recorded on the registry for 44 ICPs for NHH periods which were submitted as HHR in accordance with Flick's approved HHY profile. Flick corrected the submission types for the affected ICPs during the audit.
Active date variance with initial electrical connection date	-	-	All active dates were consistent with the initial electrical connection date.
Active ICP with no MEP	-	-	Compliant
Active Category 9 and UML "N"	-	-	Compliant

Registry and field services processes have been subject to a Flick internal audit, which found that the registry validation checks were missed for two weeks due to a staff member being away. Arrangements have been made so that another staff member will complete the safety net checks if future staff absences occur.

Registry process audits are intended to be carried out annually, and cover checks of the timeliness, validity, and accuracy of information Flick records on the registry.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 2.1</p> <p>With: Clause 10.6, 11.2, 15.2</p> <p>From: 01-Dec-17</p> <p>To: 16-Nov-18</p>	<p>46 ICPs had incorrect profiles assigned and 44 ICPs had incorrect submission types assigned for NHH periods submitted as HHR using the HHY profile.</p> <p>Three ICPs had incorrect statuses recorded on the registry for some days.</p> <p>The data was corrected during the audit.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as strong because they are sufficient to ensure that most information is recorded correctly.</p> <ul style="list-style-type: none"> The profile and submission type data accuracy issues all related to ICPs that switched in with NHH metering and had incorrect profiles and submission types recorded for the NHH period. Flick has corrected the data and put improved procedures in place. Three of the 34 disconnected ICPs checked had incorrect active dates, these appeared to be isolated errors. <p>The risk rating is low; all ICPs met the requirements of the profile and were submitted as HHR and the incorrect data has been updated on the registry.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Profiles and submission types has been corrected for all the 46 ICPs identified through this audit.</p> <p>The incorrect status for all the 3 ICPs identified through this audit has been corrected.</p> <p>The approved HHY profile has been revisited and amendment requests submitted to EA has now been approved. The recent approved amendment profile has been forwarded to the participant auditor.</p>		5/12/2018	Cleared

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Compliant procedures which includes monthly internal audit has been put in place to avoid any further occurrence of this issue.</p> <p>A robust Refresher training has been provided to the Field team on this process on 5/12/2018.</p> <p>A weekly QA has been scheduled for the Field team which involves assessing the assignment of profiles and allocation of submission type</p>	Date 5/12/2018	

2.2. Provision of information (Clause 15.35)

Code reference

Clause 15.35

Code related audit information

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

Audit observation

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

Audit commentary

This area is discussed in several sections in this report and compliance is confirmed.

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

HHR data is provided by AMS (for AMS and Smartco), Metrix (for Metrix and Counties Power), Arc, and FCLM as MEPs via SFTP.

To confirm the process I traced a sample of reads and volumes for a diverse sample of six HHR ICPs from the source files to Telemetry and HHR aggregates submissions. The sample included AMS, Smartco, Metrix, Counties Power, Arc, and FCLM meters.

Audit commentary

All read and volume data is transferred from the MEP to Flick via SFTP.

I traced a sample of data for six HHR ICPs from the source files to system and the HHR aggregates files to confirm the data transmission process. All volumes matched.

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 the Data Repository 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 Flick's current customer terms and conditions.

Audit commentary

Flick's terms and conditions include 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 Flick's current customer terms and conditions, and discussed compliance with these clauses.

Audit commentary

Flick's terms and conditions include consent to access for authorised parties for the duration of the contract. Flick confirmed that they have been able to arrange access for other parties when requested.

Audit outcome

Compliant

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

Code reference

Clause 10.35(1)&(2)

Code related audit information

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

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

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

Audit observation

The physical meter location point is not specifically mentioned in the terms and conditions, but the existing practices in the electrical industry achieve compliance.

Review of a registry list as at 25/09/18 confirmed that Flick do not supply any ICPs with metering category 3 or above.

Audit commentary

Flick only supplies ICPs with metering categories 1 and 2, and does not deal with any installations with 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 sub-clause (1) must be expressed to be for the benefit of the Authority for the purposes of the Contracts (Privacy) Act 1982, and not be able to be amended without the consent of the Authority (clause 11.15B(2)).

Audit observation

I reviewed Flick's current customer terms and conditions.

Audit commentary

Flick's terms and conditions contain the appropriate clauses to achieve compliance with 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 new connection process was examined in detail to evaluate the strength of controls.

The event detail report for 01/12/17 to 25/09/18 was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

Flick completed its first new connection in December 2017, and completed seven new connections during the audit period.

Flick accepts responsibility for the ICP and works with the MEP and electrician to progress the connection. The MEP is nominated on the registry once Flick claims the ICP and moves it to "new connection in progress" or "active" status.

Audit outcome

Compliant

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

Code reference

Clause 10.33(1)

Code related audit information

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

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

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

Audit observation

The new connection process was examined in detail to evaluate the strength of controls, and temporary electrical connections were discussed.

The event detail report for 01/12/17 to 25/09/18 was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

No temporary electrical connections were identified.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(1)

Code related audit information

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

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

Audit observation

The new connection and reconnection processes were discussed.

The event detail report for 01/12/17 to 25/09/18 was examined to identify all new connections and reconnections during the audit period, and assess compliance.

Audit commentary

Flick completes a monthly check to ensure all ICPs have full metering certification and follows up any discrepancies with the MEP. Flick also checks that ICPs are fully certified before reconnection.

Seven new connections and 114 reconnections were completed during the audit period.

- All seven new connections were fully certified on their electrical connection date.
- All 114 reconnections were fully certified on the reconnection date.

Flick provided a list of two meters which had been bridged during the audit period. Both were recertified on the date the meter was unbridged.

Audit outcome

Compliant

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

The process to ensure an arrangement is in place before trading commences on a network was examined, along with the application process.

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all networks Flick has traded on during the audit period.

Audit commentary

Flick has arrangements in place for line function services where they intend to trade.

When a customer applies using Flick's application process, registry data for the ICP is retrieved and validated. The application will only be accepted if the following criteria are met:

- valid network for Flick
- MEP is AMS, Arc, FCLM, or Metrix
- valid price category for Flick
- AMI flag is yes
- unmetered flag is no
- installation type is L.

I observed the process and noted that applications that do not meet these criteria are declined automatically.

If an application is declined, the customer had the option of leaving their email address if they would like to be contacted. Flick contacts these customers to determine whether they could be eligible for supply if their meter is upgraded, and if the upgrade is likely to be possible, and may then manually approve acceptance for a NHH non-AMI meter.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

The process to ensure an arrangement is in place with the metering equipment provider before an ICP can be created or switched in was checked.

The registry list for 01/12/17 to 25/09/18 was reviewed to identify the MEPs for Flick ICPs during the audit period.

Audit commentary

Flick demonstrated that arrangements are in place with AMS, Arc, Counties Power, FCLM and Metrix.

Flick temporarily supplied ICPs with NHH non AMI meters with Delta, LMGL, or Trustpower recorded as the MEP. Flick does not have arrangements in place with these MEPs, and this is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.13 With: Clause 10.36 From: 11-Jun-18 To: 02-Oct-18	No MEP arrangements are in place with Delta, LMGL, or Trustpower. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong, MEP arrangements are in place with the MEPs for almost all Flick ICPs. The impact is low, 17 ICPs were temporarily affected. In the event that there was an issue with one of the meters, Flick would bring forward the meter replacement date.		
Actions taken to resolve the issue		Completion date	Remedial action status
MEP contract is now in place with LMGL and progress has been made with Delta and Trustpower for arrangement of MEP agreements. The smart meter program which entails acceptance of NHH meters owned by Trustpower, LMGL and Delta has been put on hold until all agreements are in place.		6/12/2018	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>MEP validation check has been put in place for all manual acquisition of NHH ICPs. Please note that an automated process is already in place for MEP validation during acquisition of HHR ICPs.</p> <p>A weekly QA has been scheduled which involves assessment of MEP validation</p> <p>The MEP validation assessment has also been included in the scheduled monthly internal audit for the Field team.</p>	4/12/2018	

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The new connection process was examined in detail to evaluate the strength of controls.

The event detail report for 01/12/17 to 25/09/18 was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

This requirement is well understood and managed by Flick. The new connection process is detailed in **section 2.9**.

Audit outcome

Compliant

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

Code reference

Clause 11.7(2)

Code related audit information

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

Audit observation

The new connection, MEP nomination, and switching processes were examined in detail.

The event detail report for 01/12/17 to 25/09/18 was analysed in relation to updating of the registry. This clause links directly to **sections 3.3** and **3.5** below, where findings on the timeliness of updates are recorded.

Audit commentary

Flick's processes are designed to ensure that trader information is populated as required by this clause. Late updates are recorded as non-compliance in **sections 3.3** and **3.5**.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 11.1

Code related audit information

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

Audit observation

The process to manage status changes is discussed in detail in **sections 3.8** and **3.9**. In this section, the event detail report for 01/12/17 to 25/09/18 was analysed determine the overall performance for that period.

A sample of late updates were reviewed to determine why they were delayed, including:

- the ten latest updates for each status type (or all late updates if less than ten were available)
- ten late MEP nominations over 30 days; and
- ten late trader updates over 30 days.

Audit commentary

The event detail report was examined to confirm whether the registry is notified within five business days when information referred to in clause 9 of schedule 11.1 changes. In general, the timeliness of registry updates has improved since the 2017 audit.

Event	Year	Total ICPs	ICPs Notified Within 5 Days	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Status updates						
Change to active (2,0)	2016	457	383	74	4	84%
	2017	737	591	146	6	80%
	2018	114	99	15	1	87%

Event	Year	Total ICPs	ICPs Notified Within 5 Days	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Change to electrically disconnected vacant property (1,4)	2016	4	1	3	200	25%
	2017	55	53	2	3	96%
	2018	200	194	6	3	97%
Change to electrically disconnected ready for decommissioning (1,6)	2017	12	9	3	30	75%
	2018	33	21	12	28	64%
Change to electrically disconnected remotely by AMI meter (1,7)	2016	295	291	4	3	99%
	2017	54	53	1	1	98%
	2018	650	608	42	1	94%
Change to electrically disconnected at pole fuse (1,8)	2018	6	4	2	15	67%
Change to electrically disconnected due to meter disconnected (1,9)	2018	2	-	2	116	0%
Change to electrically disconnected at meter box fuse (1,10)	2018	1	1	-	1	100%
Trader updates						
MEP nominations	2018	113	37	76	143	33%
Trader updates (excluding MEP nominations and NT updates)	2018	192	97	95	117	51%

Status updates

The table above shows that the registry was not updated within five business days for 79 (7.8%) of 1,006 ICPs where a status change has been made during the audit period. 16 of the late status updates were more than 30 business days late.

A sample of ten late status changes to active were reviewed and found to be caused by:

- backdated switches, where the registry could not be updated until the switch to Flick was complete
- delays in processing the reconnection paperwork.

A sample of 30 late updates to inactive were reviewed and found to be caused by:

- errors when processing the disconnection, including not updating the event date
- backdated corrections to status, where Flick had discovered the ICP was reconnected, or an incorrect status or date had initially been applied
- delays in receiving and processing the disconnection paperwork.

The late updates are recorded as non-compliance. The team leader has temporarily taken responsibility for ensuring updates are accurate and on time, and improved procedures will be put in place.

MEP nominations

The table above shows that 76 (67%) of the 113 MEP nominations were made late.

A sample of ten late MEP nominations over 30 days were reviewed. They were all backdated to the date of the previous registry trader update, because the date was not changed when entering the MEP nomination. To avoid future non-compliance, training has been provided to the team processing MEP nominations.

Trader updates

The table above shows that 95 (49%) of the 192 trader updates for reasons other than MEP nomination or updates on switch in were made late.

A sample of ten late trader updates over 30 days were reviewed. All related to ANZSIC code corrections, and were backdated to the date of the previous registry trader update, because the date was not changed when entering the information. To avoid future non-compliance, Flick intends to update ANZSIC codes from the date the update is processed in future.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 01-Dec-17 To: 25-Sep-18	79 late status updates. 76 late MEP nominations. 95 late trader updates. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are adequate to ensure that the registry is updated on time most of the time, but there is room for improvement.</p> <p>The risk is low as most updates were completed on time or soon after they were due. The late trader updates checked were found to relate to corrections. Staff training has been completed to improve event date accuracy and prevent events from being backdated unnecessarily.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Most of the late status update and MEP nomination updates were due to the trader event date not being updated when nominating MEP or updating status. This was a training issue.		29/11/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>A robust training has been completed on registry updates on 29/11/2018.</p> <p>A weekly QA has been scheduled which includes assessment of the registry update process.</p> <p>The assessment of this process has also been included in the scheduled monthly QA for the Field team.</p>		29/11/2018	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

Audit observation

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection process was discussed.

The registry list as at 25/09/18 and event detail report for 01/12/17 to 25/09/18 were examined to identify:

- any active ICPs that do not have an MEP recorded
- any MEP nomination rejections.

ICP Decommissioning

The process for the decommissioning of ICPs was examined. A typical sample of ten decommissioned ICPs were checked to prove the process and confirm controls are in place.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

All active ICPs have a valid MEP recorded.

Flick nominates the MEP in the registry when the ICP is claimed and moved to “inactive new connection in progress” status, or “active” status.

One of the 113 MEP nominations made during the period was rejected. An MEP nomination was incorrectly processed based on a nomination the previous retailer had made before the ICP switched to Flick. No further action was required once the nomination was rejected, the correct MEP was already recorded on the registry.

Late MEP nominations are recorded as non-compliance in **section 3.3**.

ICP Decommissioning

Flick continue with their obligations under this clause. ICPs that are vacant and active, or inactive are maintained in Telemetry.

27 ICPs were decommissioned during the period, of which ten were checked. Flick had met their obligation to arrange a meter interrogation prior to or upon meter removal and notify the MEP.

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 new connection process was discussed.

The event detail report from 01/12/17 to 25/09/18 was examined to identify all new connections, and the timeliness of new connection status updates. All late updates were checked.

Audit commentary

The new connection process is described in **section 2.9**. The table below shows the timeliness of updates for new connections.

Event	Year	Total ICPs	ICPs notified within 5 days	ICPs notified greater than 5 days	Average notification days	Percentage compliant
Status updates						
Status update to active new connection (2,0)	2018	7	3	4	10	42%
Status update to inactive new connection in progress (1,12)	2018	1	1	-	5	100%

The latest update occurred 23 business days after the event. All late updates were checked and found to be caused by:

- delays in confirming the customer details so that the customer account could be created in Telemetry
- delays in receiving paperwork and processing the registry update, particularly over the Christmas 2017 to new year 2018 period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: 15-Jan-18 To: 08-May-18	Four late status updates for new connections. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are 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
Refresher training has been provided to the team which included monitoring the timeliness of registry updates.		3/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The assessment of this process has been included in the scheduled monthly internal audit for the Field team.		3/12/2018	

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

Code reference

Clause 9 (1)(k) of Schedule 11.1

Code related audit information

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

Audit observation

The process to capture and manage ANZSIC codes was examined. The registry list as at 25/09/18 was reviewed to check ANZSIC codes.

To confirm the validity of the ANZSIC codes selected I checked a diverse sample of 40 ICPs, including all ICPs with ANZSIC code 0 with metering category 2.

Audit commentary

ANZSIC codes are set based on information provided on the customer application. ANZSIC codes are checked when ICPs switch in, and during the pricing and load group checks to confirm that the ANZSIC code is consistent with the price and load group. Unknown ANZSIC codes are checked as part of the twice weekly safety net checks described in **section 2.1**. Flick has checked and cleansed their ANZSIC code information during the audit period.

Analysis of the registry list confirmed that no T99 series codes were present.

The accuracy of the ANZSIC codes for 40 ICPs were checked:

- 33 ICPs were found have correct ANZSIC codes, including three ICPs with meter category 2 and domestic ANZSIC codes
- seven ICPs were found to have incorrect ANZSIC codes and were corrected during the audit.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.6 With: Clause 9 (1)(k) of Schedule 11.1 From: 01-Dec-17 To: 16-Nov-18	Incorrect ANZSIC codes were recorded on the registry for seven ICPs. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong, as they are sufficient to ensure that most ICPs have the correct ANZSIC codes recorded. The audit risk rating is low, because the ANZSIC codes have been corrected where necessary.		
Actions taken to resolve the issue		Completion date	Remedial action status
All incorrect ANZSIC codes identified through this audit has now been corrected.		28/11/2018	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
A monthly process has been put in place to check that ANZSIC codes are consistent with the pricing and load group The accuracy of the ANZSIC code will also be assessed through the scheduled monthly QA for the Field team.		3/12/2018	

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 for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with unmetered load.

Audit commentary

Flick does not currently supply any ICPs with unmetered load.

Applications to become a customer are not accepted if the ICP has unmetered load connected. Flick's weekly safety net checks discussed in **section 2.1** will identify any ICPs where unmetered load is added. The details will be checked for any affected ICPs, and Flick will arrange for the ICP to switch out effective from the date the unmetered load was connected, or for the distributor to remove shared unmetered load for the ICP.

Two existing Flick ICPs had shared unmetered load added by the distributor during the audit period. In both cases, Flick arranged to opt out of having shared unmetered load connected to the ICPs but a short period of unmetered load remained. Non-compliance is recorded in **section 5.1** in relation to submission of unmetered volumes for these ICPs.

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

New connections

The new connection process was examined in detail as discussed in **sections 2.9** and **3.5** above. Review of the registry list as at 25/09/18 confirmed that no ICPs had "inactive - new connection in progress" status with an initial electrical connection date populated.

Seven new connections were completed during the audit period. I checked for variances between the active date, meter certification date, and the initial electrical connection date.

Reconnections

The ICP reconnection process was examined. The event detail report for 01/12/17 to 25/09/18 was analysed, and the findings on the timeliness of registry updates are recorded in **section 3.3**.

Audit commentary

Flick's 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. Processes have been automated to prevent an ICP being recorded against a customer account for any day that it is active against another account. A monthly report is generated to check for ICPs that do not have open meters.

New connections

Flick processed seven new connections during the audit period. In all cases, Flick's active date was consistent with the initial electrical connection date and meter certification date. I checked the active dates to the connection paperwork and confirmed that Flick's dates were correct.

Reconnections

Reconnections are processed manually on the registry once paperwork is received.

A typical sample of ten reconnections were checked, all had the correct status and date applied.

All 114 reconnections were fully certified on the reconnection date. Late registry updates to active are recorded as a non-compliance in **section 3.3**.

Audit outcome

Compliant

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The event detail report for 01/12/17 to 25/09/18 was examined to identify all status changes to inactive. A typical sample of five ICPs at each inactive status (or all ICPs if less than five were available) were checked. The findings in relation to the timeliness of updates to registry are recorded in **section 3.3**.

The list file as at 25/09/18 was examined and found no ICPs were at "inactive - new connection in progress status". One ICP had remained at "inactive – vacant" status after switching in, and was checked to confirm whether the status was correct.

Audit commentary

Flick conducts disconnections remotely, and updates the registry once confirmation of the disconnection is provided by the MEP.

892 ICPs were disconnected during the audit period. I reviewed the reason codes and disconnection dates for the sample of 34 disconnections, and confirmed that they had been applied correctly except for:

ICP	Status and date applied	Correct status and date	Comments
0545442043LCFC2	1,4 (05/03/18)	1,4 (01/03/18)	Cleared. Now corrected.
0005292204RN3FE	1,4 (04/09/18)	reversed	Cleared. Now corrected.
0005661382RN0FC	1,6 (13/02/18)	2,0	Cleared. Changed in error on advice from the MEP, now corrected.

ICP 0002033880CN140 has remained at “inactive – vacant” status after switching in, I confirmed that the status is still correct and the ICP remains disconnected.

Flick provided a list of nine ICPs which had consumption recorded during an inactive period. All had their status correctly returned to active, or had switched to another retailer for the period of consumption.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.9 With: Clause 19 Schedule 11.1 From: 13-Feb-18 To: 04-Sep-18	Three ICPs were incorrectly recorded as inactive on the registry when they were active. All have since been corrected. 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 inactive status is normally applied correctly, but errors may occasionally occur due to the manual nature of registry updates. The impact is low, because three ICPs with incorrect statuses on some days were identified and all had subsequently been corrected.		
Actions taken to resolve the issue		Completion date	Remedial action status
The three ICPs identified with incorrect status through this audit has been corrected		5/12/2018	Cleared

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Refresher training has been provided to the Field team on 5.12.2018.</p> <p>The assessment of status update process has been included in the scheduled monthly QA for the Field team.</p>	5/12/2018	

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Audit observation

Whilst this is a Distributor's code obligation, I investigated whether any queries had been received from Distributors in relation to ICPs at the new or ready status for more than 24 months, and I checked the process to manage these requests.

A registry list as at 25/09/18 was reviewed to identify all ICPs with "new" or "ready" status and Flick recorded as the proposed trader.

Audit commentary

Flick completed seven new connections during the audit period. New connections in progress are monitored manually.

No ICPs currently have "new" or "ready" status and Flick recorded as the proposed trader, and no requests for information on "new" or "ready" ICPs have been received from distributors. If received these would be actioned on a case by case basis.

There is currently no regular monitoring of ICPs at "new" or "ready" status on the registry. I recommend that ICPs with "new" or "ready" status should be monitored:

Description	Recommendation	Audited party comment	Remedial action
Monitoring of "new" and "ready" ICPs	A Registry List (type P) with proposed trader = FLCK and status = 000 and 999 should be run at least quarterly to identify ICPs which have been at "new" or "ready" status for more than 18 months and require follow up.	Flick agrees to put a process in place for a report to be run and actioned quarterly to identify ICP's which have been at "new" or "ready" status.	Identified

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

A gaining trader must advise the registry manager of a switch no later than 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 Flick deem all conditions to be met.

A typical sample of five transfer switches were checked to confirm that they were notified to the registry within two business days, and that the correct switch type was selected.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

Flick's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are sent as soon as all pre-conditions are met, and the withdrawal process is used if the customer changes their mind.

Switch type is selected based on information provided by the customer on application. The customer is asked their move in date and whether they have been billed at the property by another retailer as part of the application process.

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

NT processes have been subject to a Flick internal audit, which found compliance for the sample checked. Switching audits are intended to be carried out monthly.

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

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

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

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

Audit observation

An event detail report for 01/12/17 to 25/09/18 was reviewed to:

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

A sample of three ANs per response code were reviewed to determine whether the response codes had been correctly applied.

The switch breach report was examined for the audit period.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

AN timeliness

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

AN content

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.

All transfer AN files were examined on the event detail report. All proposed event dates were within 10 business days of NT receipt, and 98.3% were within five business days.

Total transfer switches	Total over 10 business days	Total within 10 business days	Total within 5 business days	% within 5 business days
2,703	0	2,703	2,658	98.3%

The previous audit found four transfer ANs had incorrect response codes applied. I reviewed a sample of three 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 all AN files checked had incorrect response codes applied due to human error:

ICP	Applied Code	Correct Code	Reason
1000549913PC54D	AA	AD	Advanced metering
0000006748TRE4D	AA	AD	Advanced metering
0005046181RNAF1	AA	AD	Advanced metering
0000067136TRD75	AD	AA	No other codes applied
1002035027LC35C	AD	AA	No other codes applied
1002035027LC35C	AD	AA	No other codes applied
0005909600RN114	OC	AD	Transfer switches are expected to be occupied, advanced metering
0000123787UN625	OC	AD	Transfer switches are expected to be occupied, advanced metering
0000018208TR9CC	OC	AD	Transfer switches are expected to be occupied, advanced metering

Internal audit

AN processes have been subject to a Flick internal audit. Following the first switching internal audit additional training was provided to the switching team to assist them to select the correct AN response code. I note that the incorrect AN response codes found during the audit occurred before the internal audit and training were completed.

Switching audits are intended to be carried out monthly.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: Clauses 3 and 4 Schedule 11.3 From: 04-Jan-18 To: 09-Sep-18	Nine transfer switches had incorrect AN response codes applied. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls over AN responses are moderate. The codes are selected manually and further training has been provided to assist staff to select the correct codes.</p> <p>The impact is assessed as low. Whether AMI metering is present can normally be determined from other registry information.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Refresher training has been provided to switch team on use of correct AN code.</p> <p>This process has been automated effective 10/12/2018 which would see a decrease in this error.</p>		23/11/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>A weekly QA has been scheduled for the switch team which involves assessment of the AN code</p> <p>The assessment of this process has also been included in the monthly internal audit for the switch team.</p> <p>The AN response has now been automated effective 10/12/2018. This should eliminate most of the errors going forward.</p>		23/11/2018	

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

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 was reviewed to identify late CS files, and an extreme case sample of the latest ten files were checked.

An event detail report for the period from 01/12/17 to 25/09/18 was reviewed, to identify CS files issued by Flick. 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.

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

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

CS timeliness

Flick has implemented improved processes to ensure that switches are completed on time. Internal reporting on switch due dates is used, as well as the switch breach report from the registry. The switch breach history report recorded 50 late move CS files. All late files were checked:

- one ICP had a withdrawal completed, and the CS was not late
- 45 were sent within five business days of the event date, and were not late
- four were sent within six days of the event date; the late files occurred during a period with a high switching workload, which resulted in delays in processing files.

CS content

CS files are created manually on the registry, using information from Telemetry.

The accuracy of the content of CS files was confirmed by checking a sample of five transfer CS files. The information recorded in the files was correct, apart from:

- ICP 0000003989TR4CC had an actual switch read entered with a read type of estimate
- ICP 0000005591TR5B9 had an incorrect last actual read date and read; the CS read was 24 kWh higher than the correct estimated read for the event date.

For a further two transfer switches checked in **section 6.6**, a read type of actual had been applied where an unvalidated photo reading was used.

The Registry Functional Specification v22.21 states that average daily consumption within the CS file should be the average kWh per day for the last read period. Because Flick receives daily readings, estimated daily consumption is calculated as the average daily consumption over the past 60 days in Telemetry. While this is not technically consumption for the last read to read period, it provides a reasonable indication of the average daily consumption. Analysis of the estimated daily kWh on the event detail report identified:

Estimated daily kWh	Count of transfer CS files
Negative	0
Zero	37
More than 200 kWh	11

A sample of ten of these ICPs were checked:

- all five ICPs with zero estimated daily consumption should have had consumption recorded, the zero value was entered in error

- all five ICPs with estimated daily consumption over 200 kWh had the total consumption for the last 60 days entered, instead of the average daily consumption.

It appears that the incorrect CS content is likely to have occurred due to manual data entry errors when creating the CS files based on Telemetry information. Automation of the CS process in Telemetry is currently being tested, and once implemented the changes are expected to reduce CS content errors.

Internal audit

CS processes have been subject to a Flick internal audit, which found some errors in CS content. The switching team was provided further training in the short term, and system changes to allow automation of the switching process are currently being tested. Switching audits are intended to be carried out monthly.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.3 With: Clause 5 Schedule 11.3 From: 25-Dec-17 To: 04-Sep-18	Four late CS files for transfer switches. Some incorrect CS content. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate now that improved monitoring of switch timeliness has been implemented. CS files are created manually on the registry based on information in Telemetry and there is some room for errors to occur as data is transferred. The impact is assessed as low, most files were sent on time and most CS content was correct. The total volume difference identified was 24 kWh.		
Actions taken to resolve the issue		Completion date	Remedial action status
Process of CS file submission through registry is in the testing phase of process automation. We will see a decrease in error rate as each automation stage progresses.		1/3/2018 (estimated completion time)	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>A Robust training has been completed with the Switch team</p> <p>A weekly QA has been scheduled which involves assessing the CS file content and timeframes.</p> <p>The assessment of this process is also covered in the scheduled monthly internal audit as the automation of this process progresses, we will see a decrease in the error rate.</p>	6/12/2018	

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 two validated meter readings.

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

Audit observation

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

The event detail report for 01/12/17 to 25/09/18 was reviewed to identify all read change requests and acknowledgements during the audit period.

- 378 RR files were issued to Flick by other traders for transfer switches. 187 of those were rejected. I reviewed ten rejected files to confirm the reasons for rejection were valid and confirm that Flick's system reflected the outcome of the RR process, and ten accepted files to confirm that Flick's system reflected the outcome of the RR process. I note that a high proportion of the rejected files were issued by Electric Kiwi, who had issued some RRs where the RR reading matched the CS reading.
- 1194 RR files were issued by Flick for transfer switches. 157 of those were rejected. I reviewed 10 rejected and ten accepted files to confirm that the requests were supported by at least two actual readings, that the content of the files was accurate, and that Flick's system reflected the outcome of the read change process.

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

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

Application of CS readings

Switch ins are monitored. The data team compare actual AMI data to the switch read to determine whether an RR is required, and advise the switching team. The Telemetry system calculates the start read based on the AMI reading at the end of the first day Flick has supplied the ICP, and deducts the sum of the trading periods for that day to determine the expected start read.

If Flick receives AMI data confirming that the expected start read is more than ± 5 kWh different to the switch event reading provided within five business days, an RR will be issued. If the difference is less than ± 5 kWh an RR is not issued. Small differences between CS readings and AMI midnight readings can arise where the losing trader has provided an actual reading that is not a midnight reading on the switch date. To address this, Flick has logged a code change request with the Authority to require retailers to use AMI midnight reads for switching where available.

If a difference between the expected start read and switch event read is identified more than five business days after the switch in, an RR is not normally issued because Flick has found they are often not accepted. I found that in some cases the data team did request an RR to be issued more than five business days after switch completion, and each ICP is considered on a case by case basis.

Where an RR is not issued, Flick will apply the AMI data for billing and reconciliation. If AMI data is not received for the first day of supply and the CS read cannot be checked, Telemetry will estimate the consumption based on the CS reading and next available reading, using its estimation process discussed in **section 9.4**. I reviewed ICPs with missing AMI data where this process had been followed during the audit. I found that where an ICP switched in and no subsequent readings were entered, Telemetry would not create an estimate. This is discussed further and recorded as non-compliance in **sections 11.4 and 12.7**.

To confirm the process for CS readings where no RR was issued, I checked a sample of five transfer CS files with estimated readings where no RR had been issued to confirm that the correct readings were recorded in Telemetry. I found that:

- for one ICP the CS reading matched the recalculated reading, and the correct read was recorded in Telemetry and used for submission
- for three ICPs, Flick did not identify the difference between CS and actual data until more than five business days had passed, and an RR was not issued; the difference between the CS and actual readings applied for these ICPs was 121 kWh of under submission
- for one ICP the difference between the CS and recalculated readings was less than 5 kWh and no RR was issued, resulting in 2 kWh of under submission.

RR

Where an RR issued by Flick is accepted, Flick does not need to make any changes in Telemetry. The expected start read recorded in the RR and AMI data are automatically applied. To confirm this, I checked a sample of ten transfer RRs which were accepted, and found that the reads recorded and used for submission by Flick reflected the outcome of the RR process.

Where an RR issued by Flick is rejected, the file is passed to the data team for action by the switching team. I saw evidence of these notifications. The data team will adjust the reading and interval data to match the CS file only if it will result in consumption that is very close to the actual AMI data. If it will result in a larger difference, no change is made. To confirm this process, I checked a sample of ten transfer RRs which were rejected and found:

- four ICPs had the correct readings recorded in Telemetry, in three cases this was because the RR was reissued by Flick and subsequently accepted by the other trader, and in one case the RR had been issued in error and the correct read matched the CS file
- six ICPs had the RR read recorded in Telemetry instead of the agreed switch reading; for one ICP the losing trader had invalidly rejected the RR, and for the other five ICPs 226 kWh was under submitted by Flick.

I also found the RR for ICP 0000049859UNF87 was rejected and the agreed reading was not applied by Flick, resulting in under submission of 13 kWh.

In Telemetry actual AMI readings from the MEP cannot be invalidated and replaced with other readings. Switch in readings can usually be modified because the MEP does not provide AMI readings that are outside Flick's period of responsibility, and the switch reading falls within the losing trader's period of responsibility. In rare circumstances, where a withdrawal has been completed Flick may have actual readings on the switch in date that cannot be modified.

Description	Recommendation	Audited party comment	Remedial action
Replacement of actual AMI readings	<p>Telemetry does not allow replacement of actual AMI data via its front end.</p> <p>In some cases, the agreed switch reading does not match the AMI data. Under the code, Flick is required to apply the agreed switch reading for reconciliation.</p> <p>I recommend that as part of its review and automation of the RR process, Flick considers how they could ensure that the agreed switch reading is consistently applied.</p>	<p>Flick agrees with the recommendation and has noted to include the consistent application of the agreed switch reading in the RR process automation.</p> <p>A code amendment has been raised by Flick to align the timeframe between data delivery and RR process as this is also a contributing factor in the inconsistent application of the agreed switch readings.</p>	Identified

The content of 20 transfer RR files were checked. All content was correct and appropriately supported by AMI data except ICP 0000103542UNF4F, which had readings for the wrong date recorded resulting in the RR read being 97 kWh too low. The file was accepted by the other trader, and is included in the count of six ICPs where the incorrect reading was recorded in Telemetry above.

AC

Where another trader issues an RR to Flick, the values are checked against Telemetry to determine whether it should be accepted, and an AC file is issued.

In Telemetry actual AMI readings from the MEP cannot be invalidated and replaced with other readings. This means that if an ICP switches out on an actual AMI reading, Flick cannot modify that reading in Telemetry. For this reason, Flick normally only accepts RRs if they contain data matching Telemetry because either an error was made when entering the reads into the original CS file, or the CS reading was estimated and AMI data has later become available and is consistent with the RR. If Flick accepts an

RR from another trader where an actual value is already recorded in Telemetry, Flick is unable to apply the agreed switch reading.

To confirm the process I checked ten AC files for transfer switches rejecting the other trader's RR and found:

- nine had the correct readings applied in Telemetry
- one did not have the correct readings applied in Telemetry, because the RR was rejected when it should have been accepted; the read provided in Flick's CS file was incorrect because of a data entry error when creating the file, and the read provided in the RR was correct and matched Flick's system.

I also checked ten RR files for transfer switches accepting the other trader's RR:

- eight ICPs had the correct readings recorded in Telemetry
- two ICPs did not have the correct readings recorded in Telemetry, resulting in under reporting of 3 kWh.

Timeliness of RR and AC files

The switch breach history report was examined, one late RR file was identified for a transfer switch. The RR was delayed by multiple withdrawal requests for the ICP. No late acknowledgements were identified.

Internal audit and planned improvements

RR and AC processes have been subject to a Flick internal audit, which found some errors in the handling of RR and AC files. The switching team was provided further training in the short term, and system changes to allow automation of the RR and AC process is planned. Switching audits are intended to be carried out monthly.

Flick also intends to update its process documentation for RRs by the end of November 2018 to ensure that the process is clear and consistent.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.4</p> <p>With: Clause 6(1) and 6A Schedule 11.3</p> <p>From: 01-Dec-17</p> <p>To: 16-Nov-18</p>	<p>One late RR file.</p> <p>One RR file contained an incorrect reading.</p> <p>14 ICPs did not have the agreed switch reading recorded in Telemetry.</p> <p>One AC file was invalidly rejected.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>

Audit risk rating	Rationale for audit risk rating		
Medium	<p>The controls are assessed to be moderate overall, because most of the time Flick will apply the same reading as the other trader. In certain circumstances it is likely that Flick will not apply the agreed switch reading, including:</p> <ul style="list-style-type: none"> • switch outs where Flick has actual AMI data and the agreed switch read differs from this • switch ins where the difference between the CS read and AMI data is less than ± 5 kWh • switch ins where the difference between the CS read and AMI data is not identified for more than five days after the switch is completed • switch ins where an RR is rejected but processing the correct read will result in a large volume difference for customer billing. <p>The audit risk rating is medium, the issues could have a moderate impact on settlement outcomes, other participants, and consumers if not addressed. Flick intends to review and automate its RR and AC processes, and document improved procedures.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
RR process documentation has been reviewed to include the improved procedures which includes the change of threshold for rejecting CS reads from 5 to 1 unit. A robust refresher training on replacement read process has been completed on 6/12/2018		6/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A weekly QA has been scheduled for the Switch team which includes the assessment of the read replacement process A monthly internal audit has also been planned for the switch team which would include the assessment of the replacement read process. The replacement read process is in the top priority list for automation of Flick processes. The automation of this process should eliminate most of the above issues. A code amendment has also been raised by Flick to align the timeframe between data delivery and RR process which would also help in eliminating some of this issue.		Ongoing	

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report for the period from 01/12/17 to 25/09/18 was reviewed to identify all read change requests and acknowledgements where clause 6(2) and (3) of schedule 11.3 applied.

Audit commentary

Other retailers cannot issue read change requests to Flick under clause 6(2) and (3) of schedule 11.3 because Flick is a HHR only trader.

Review of the event detail report identified 1,503 RR files issued by Flick within five business days of the CS receipt, where the CS file contained estimated readings. 108 of these requests were rejected. I reviewed a sample of ten of the rejected files, to confirm that the data contained in the read file was accurate and that Flick's system reflected the outcome of the RR process.

In all cases the reads recorded in Flick's requests reflected the expected AMI read and were appropriately supported by AMI data.

Most of the invalidly rejected requests were accepted once Flick reissued them. Flick had applied the correct readings in Telemetry for all ICPs except:

- For 0000049859UNF87 the losing trader confirmed that the switch reading applied as actual and the RR was validly rejected. This resulted in under submission of 13 kWh, and is recorded as non-compliance in **section 4.4**. Because the CS read was actual, this RR was not issued under clause 6.2 of schedule 11.3.
- For ICP 0005411327RN7CD the RR was invalidly rejected by the other trader and the reading applied was 88 kWh higher. This is not recorded as non-compliance for Flick, because the other retailer is at fault.

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 11.3

Code related audit information

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

Audit observation

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

Audit commentary

Flick 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 Flick deem all conditions to be met.

A typical sample of five switch moves were checked to confirm that they were notified to the registry within two business days, and that the correct switch type was selected.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

Flick's processes are compliant with the requirements of Section 36M of the Fair Trading Act 1986. NT files are sent as soon as all pre-conditions are met, and the withdrawal process is used if the customer changes their mind.

Switch type is selected based on information provided by the customer on application. The customer is asked their move in date and whether they have been billed at the property by another retailer as part of the application process.

The five NT files checked had the correct switch type selected. Three NT files were sent on time but two files were sent four and six days after agreement was reached, because the NT file was rejected by the registry and needed to be resent. Registry acknowledgement files are directed to work queues, which are managed through the switching dashboard.

NT processes have been subject to a Flick internal audit, which found compliance for the sample checked. Switching audits are intended to be carried out monthly.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.7 With: Clause 9 Schedule 11.3 From: 13-Mar-18 To: 24-May-18	Two switch moves were requested more than two business days after pre conditions were cleared. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are assessed to be strong, NTs are normally requested on time and there are controls in place to detect failed registry updates and re-send the files. The impact is low. Two NT files were affected and they were between two and four business days late.		
Actions taken to resolve the issue		Completion date	Remedial action status
The two late files were due to system constraints which has now been resolved and there should not be any further occurrence of this issue.		30/11/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The process of assessing timeframes of submitting NT files is monitored through the weekly QA process of the Switch team The scheduled monthly internal audit of the Switch team also includes the assessment of this process.		Ongoing	

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

- 10(1)(a) If the losing trader accepts the event date proposed by the gaining trader, the losing trader must complete the switch by providing to the registry manager:
 - 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

An event detail report for 01/12/17 to 25/09/18 was reviewed to:

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

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

The switch breach report was examined for the audit period.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

AN timeliness

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

AN content

All 4,645 switch move AN files were examined on the event detail report:

- no ANs had proposed event dates later than 10 business days after receipt of the NT
- no ANs had a proposed transfer date earlier than the gaining trader’s proposed date.

The previous audit found four transfer ANs had incorrect response codes applied. I reviewed a sample of three (or all) 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 four of the AN files checked had incorrect response codes applied due to human error:

ICP	Applied Code	Correct Code	Reason
0000002494DED45	AA	AD	Advanced metering
0000203130DE82D	AA	AD	Advanced metering
0000378245TU2ED	AA	AD	Advanced metering
0005729912RN7E8	CO	AD	Customer was not under contract, advanced metering

Internal audit

AN processes have been subject to a Flick internal audit. Following the first switching internal audit additional training was provided to the switching team to assist them to select the correct AN response

code. I note that the incorrect AN response codes found during the audit occurred before the internal audit and training were completed.

Switching audits are intended to be carried out monthly.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.8</p> <p>With: Clause 10(1) Schedule 11.3</p> <p>From: 04-Jan-18</p> <p>To: 19-Jan-18</p>	<p>Four switch moves had incorrect AN response codes applied.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls over AN responses are moderate, also taking into account the non-compliance found for all transfer switch AN files checked. The codes are selected manually and further training has been provided to assist staff to select the correct codes.</p> <p>The impact is assessed as low. Whether AMI metering is present can normally be determined from other registry information.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Refresher training has been provided to switch team on use of AN code.</p> <p>This process has now been automated effective 10/12/2018 which would eliminate most of the errors.</p>		23/11/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>A weekly QA has been scheduled for the switch team which involves assessment of the AN code.</p> <p>The assessment of this process has also been included in the monthly internal audit for the switch team.</p> <p>The CS file submission which includes the AN response code is in the testing phase of process automation. The automation of this process will eliminate most of the errors.</p>		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 sub-clause (1)(a):

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

Audit observation

An event detail report for 01/12/17 to 25/09/18 was reviewed to:

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

Audit commentary

Switches were completed as required by this clause.

As described in **section 4.8**, proposed event dates for switch moves were compliant.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 11.3

Code related audit information

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

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

Audit observation

The process to manage the sending of the CS file within five business days of NT receipt was examined. The switch breach history report was reviewed to identify late CS files; all late files were checked.

An event detail report for the period from 01/12/17 to 25/09/18 was reviewed, to identify CS files issued by Flick. 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.

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

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

CS timeliness

Flick has implemented improved processes to ensure that switches are completed on time. Internal reporting on switch due dates is used, as well as the switch breach report from the registry. The switch breach history report recorded 318 late move CS files. All late files were checked:

- 60 ICPs had withdrawals completed, and the CS was not late
- 256 were sent within five business days of receipt of the NT, and were not late
- two were sent within seven days of receipt of the NT, both files were sent late during a period when some switching staff were on leave.

CS content

The accuracy of the content of CS files was confirmed by checking a sample of five switch move CS files. The information recorded in the files was correct, apart from:

- one CS had the last actual read date incorrectly recorded as it reflected the last day of Flick's responsibility instead of the last actual read date; the switch event read was correct, and correctly classified as an estimate
- two CS files had estimated daily kWh which were more than ± 3 kWh different from the estimated daily kWh calculated by Telemetry.

The Registry Functional Specification v22.21 states that average daily consumption within the CS file should be the average kWh per day for the last read period. Because Flick receives daily readings, estimated daily consumption is calculated as the average daily consumption over the past 60 days. Analysis of the estimated daily kWh on the event detail report identified:

Estimated daily kWh	Count of switch move CS files
Negative	0
Zero	243
More than 200 kWh	0

A sample of five of these ICPs were checked; all should have had consumption recorded, the zero value was entered in error.

As discussed in **section 4.3**, it appears that the incorrect CS content is likely to have occurred due to manual data entry errors when creating the CS files based on Telemetry information. Future automation of the CS process in Telemetry is expected to reduce CS content errors.

Internal audit

CS processes have been subject to a Flick internal audit, which found some errors in CS content. The switching team was provided further training in the short term, and system changes to allow automation of the switching process are currently being tested. Switching audits are intended to be carried out monthly.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.10 With: Clause 11 Schedule 11.3 From: 13-Mar-18 To: 19-Sep-18	Two late switch move CS files. Some incorrect CS file content. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as moderate now that improved monitoring of switch timeliness has been implemented. CS files are created manually on the registry based on information in Telemetry and there is some room for errors to occur as data is transferred. The impact is assessed as low, most files were sent on time and most CS content was correct. No volume differences were identified.		
Actions taken to resolve the issue		Completion date	Remedial action status
Refresher training on the Switch process which included the CS file submission has been completed on 5/12/2018		5/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A weekly QA has been scheduled for the Switch team which include the assessment of the CS file submission process A monthly internal audit has also been planned for the switch team which includes this process The CS file submission process is in the testing phase of process automation. The automation of this process will eliminate most of the errors.		Ongoing	

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 change requests was examined.

The event detail report for 01/12/17 to 25/09/18 was reviewed to identify all read change requests and acknowledgements during the audit period.

- 176 RR files were issued to Flick by other traders for switch moves. 59 of those were rejected. I reviewed ten rejected files to confirm the reasons for rejection were valid and confirm that Flick's system reflected the outcome of the RR process, and ten accepted files to confirm that Flick's system reflected the outcome of the RR process. I note that a high proportion of the rejected files were issued by Electric Kiwi, who had issued some RRs where the RR reading matched the CS reading.
- 1,764 RR files were issued by Flick for switch moves. 191 of those were rejected. I reviewed 10 rejected and ten accepted files to confirm that the requests were supported by at least two actual readings, that the content of the files was accurate, and that Flick's system reflected the outcome of the read change process.

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

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

The read recording and read renegotiation processes are the same for transfer switches and switch moves. These processes are discussed in **section 4.4**. In this section I have documented testing completed for switch moves to confirm these process and controls.

Application of CS readings

To confirm the process for CS readings where no RR was issued, I checked a sample of five switch move CS files with estimated readings where no RR had been issued. I found that:

- for one ICP the CS reading matched the recalculated reading, and the correct read was recorded in Telemetry and used for submission
- for three ICPs, Flick did not identify the difference between CS and actual data until more than five business days had passed, and an RR was not issued; the difference between the CS and actual readings applied for these ICPs was 741 kWh of under submission
- for one ICP the difference between the CS and recalculated readings was less than 5 kWh and no RR was issued, resulting in 3 kWh of over submission.

RR

To confirm that Telemetry recorded the correct outcome where Flick's RR files were accepted, I checked a sample of ten switch move RRs which were accepted, and found that the reads recorded and used for submission by Flick reflected the outcome of the RR process.

To confirm that Telemetry recorded the correct outcome where Flick's RR files were rejected, I checked a sample of ten switch move RRs which were rejected and found:

- four ICPs had the correct readings recorded in Telemetry, in two cases this was because the RR was reissued by Flick and subsequently accepted by the other trader, and in the other two cases Telemetry had been adjusted to apply the correct reading
- six ICPs had the RR read recorded in Telemetry instead of the agreed switch reading, in all cases the other trader had validly rejected Flick's RR.

The content of 20 switch move RR files were checked, all content was correct and appropriately supported by AMI data.

AC

To confirm that Telemetry recorded the correct outcome where Flick rejected another trader's RR, I checked ten AC files for switch moves rejecting the other trader's RR and found all had the correct readings applied in Telemetry.

To confirm that Telemetry recorded the correct outcome where Flick accepted another trader's RR, I checked ten RR files for switch moves accepting the other trader's RR:

- seven ICPs had the correct readings recorded in Telemetry
- three ICPs did not have the correct readings recorded in Telemetry, resulting in under reporting of 1 kWh.

I did not identify any invalidly rejected RR files issued by other traders for switch moves.

Timeliness of RR and AC files

The switch breach history report was examined, two late RR files were identified for a switch moves. Both were delayed while Flick waited for AMI data to be received, so that the correct switch reading could be confirmed. No late acknowledgements were identified.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.11</p> <p>With: Clause 12 Schedule 11.3</p> <p>From: 01-Dec-17</p> <p>To: 16-Nov-18</p>	<p>Two late RR files.</p> <p>13 ICPs did not have the agreed switch reading recorded in Telemetry.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Medium</p>	<p>The controls are assessed to be moderate overall, because most of the time Flick will apply the same reading as the other trader. In certain circumstances it is likely that Flick will not apply the agreed switch reading, including:</p> <ul style="list-style-type: none"> • switch outs where Flick has actual AMI data and the agreed switch read differs from this • switch ins where the difference between the CS read and AMI data is less than ± 5 kWh • switch ins where the difference between the CS read and AMI data is not identified for more than five days after the switch is completed • switch ins where an RR is rejected but processing the correct read will result in a large volume difference for customer billing. <p>The audit risk rating is medium, the issues could have a moderate impact on settlement outcomes, other participants, and consumers if not addressed. Flick intends to review and automate its RR and AC processes, and document improved procedures.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>RR process documentation has been reviewed to include the improved procedures which includes the change of threshold for rejecting CS reads from 5 to 1 unit.</p> <p>A robust read replacement process training has been completed on 6/12/2018</p> <p>Flick has also raised a code amendment for actual read to be defined as midnight read instead of reading from anytime of the day. The current non-clarification of an actual read contributes to the inconsistent CS read being applied by retailers.</p>		6/12/2018	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>A weekly QA has been scheduled for the Switch team which includes the assessment of the read replacement process</p> <p>A monthly internal audit has also been planned for the switch team which would include the assessment of the read replacement process.</p> <p>The read replacement process is in the top priority list of automation of Flick processes. The automation of this process should eliminate most of the above issues</p>	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 three business days after the arrangement comes into effect.

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

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

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

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

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

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

Audit observation

An event detail report for 01/12/17 to 25/09/18 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 01/12/17 to 25/09/18 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 01/12/17 to 25/09/18 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 01/12/17 to 25/09/18 was reviewed to:

- identify all switch withdrawal requests (NWs) issued by Flick; and check the content of a sample of two withdrawals per withdrawal code
- identify all switch withdrawal acknowledgements (AWs) issued by Flick; and check a sample of ten AW rejections to confirm whether they were validly rejected
- confirm timeliness of withdrawal requests, as this is not currently being identified on the switch breach report, an extreme case sample of ten late withdrawal requests were checked.

The switch breach report was checked for any late NW and AW files.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

NW

1,301 NWs were issued by Flick; 119 (9%) were rejected by the other trader. The content of a sample of 13 files were checked, including 10 files which had been rejected. All had the correct withdrawal advisory codes except:

ICP	Applied Code	Correct Code	Reason
0578717987LCED7	CX	WP	Wrong premises was requested
0000227605UN0DA	DF	-	File sent in error, should have been processed as a cancelled application internally by Flick.

The switch breach report did not record any late NW files. Analysis of the event detail report found 20 (1.5%) of the 1,301 NWs were issued more than two months after the switch date. Nine of these late withdrawals used the code for wrong premises, and I note that this issue often does not become apparent for an extended period after a switch completes. A sample of the ten latest files were checked, and I found they were delayed while investigation was carried out to determine whether a withdrawal was required.

AW

1,413 NWs were issued to Flick, and 74 (5%) of these were rejected. I reviewed a sample of ten rejected NWs and found nine of the rejections were based on the information available at the time the response was issued. The NW for ICP 0486166511LC774 was rejected in error, and accepted by Flick once reissued by the other trader.

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

Internal audit

NW and AW processes have been subject to a Flick internal audit, which found compliance for the sample checked. Switching audits are intended to be carried out monthly.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.15</p> <p>With: Clauses 17 and 18 Schedule 11.3</p> <p>From: 08-Jan-18</p> <p>To: 18-Sep-18</p>	<p>20 switch withdrawal requests were backdated greater than two months from the event date.</p> <p>Two switch withdrawal requests had incorrect advisory codes applied.</p> <p>One switch withdrawal request from another trader was rejected in error.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>

Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as strong as they are sufficient to mitigate risk most of the time.</p> <p>The audit risk rating is low, a small number of files were affected and the rejected NW was accepted on reissue.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
The backdated withdrawals were either initiated by customers or other retailers. It was essential to raise these to correct customer accounts. Flick actions requests for withdrawals as soon as incorrect property or incorrect sign ups are identified.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Retraining has been provided to switch team on the use of the correct withdrawal codes.</p> <p>A weekly QA has been scheduled for the switch team which includes the assessment of the withdrawal process.</p> <p>The assessment of the withdrawal process has also been included in the monthly internal audit</p>		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

All meter readings used in the switching process are validated meter readings or permanent estimates.

I identified one CS files which contained incorrect readings (discussed in **section 4.3**) and one RR file which contained incorrect readings (discussed in **section 4.4**).

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.16 With: Clause 21 Schedule 11.3 From: 11-May-18 To: 20-Jun-18	One incorrect CS read and one incorrect RR read were provided. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate, as they are sufficient to ensure that the correct read is applied most of the time. The manual processes to both estimate where the switch read is different to the AMI read, and process RR files, can result in data entry errors or missed data. The audit risk rating is low, because most reads provided are correctly applied.		
Actions taken to resolve the issue		Completion date	Remedial action status
A refresher training has been completed on 5/12/2018 on both the CS file submission process and the read replacement process.		5/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A weekly QA has been scheduled which includes assessment of both the CS file submission process and the read replacement process A monthly audit has also been planned for the switch team which includes the assessment of the both the processes mentioned above The CS file automation is in the testing phase and read replacement process is in the priority list for automation of Flick processes		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 01/12/17 to 25/09/18 was analysed to identify all withdrawn switches with a “CX” code applied prior to the switch completion date for any switch save protected retailer.

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

Flick became a switch save protected retailer on 01/11/2017, and no win back activity is completed.

The event detail report was checked and found one “CX” coded switch withdrawal request was sent prior to the switch completion date. I confirmed that the withdrawal was at the customer’s request, and no enticements were offered by Flick.

Switch save protection processes have been subject to a Flick internal audit, which found compliance.

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 01/12/17 to 25/09/18 was reviewed to identify all ICPs with shared unmetered load during the period.

Audit commentary

Flick does not currently supply any ICPs with shared unmetered load.

Processes to prevent ICPs with unmetered load from switching in, and to monitor existing ICPs for addition of unmetered load are discussed in **sections 2.1 and 3.7**.

Flick has no ability to submit volumes for unmetered load, and do not accept customer applications for ICPs with unmetered load connected. Unmetered load was added by the distributor after these ICPs switched to Flick, and no unmetered load was reported for Flick's period of supply with unmetered load:

ICP	UNM start date	UNM end date	Expected daily kWh	kWh for period with unmetered load
0005253993RN7CD	8/05/2018	20/05/2018	0.16	2.1 kWh
0005313244RNBB2	11/01/2018	15/01/2018	0.33	1.6 kWh

The 2017 audit found ICP 0005039797RN40C had shared unmetered load added on 13/03/2017, and switched to another retailer effective from 27/04/2017. No unmetered load was reported for the period from 13/03/2017 to 26/04/2017, resulting in under reporting of 3.6 kWh. No corrections have been processed for this ICP.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 5.1 With: Clause 11.14 From: 11-Jan-18 To: 20-May-18	No unmetered volumes were reported for two ICPs with unmetered load for part of the audit period. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong, as they prevent shared unmetered ICPs from switching in, and promptly identify added shared unmetered load so that appropriate action can be taken. The impact is very low, and resulted in under reporting by 3.7 kWh.		
Actions taken to resolve the issue		Completion date	Remedial action status
Refresher training has been completed on 30/11/2018 on safety net process which identifies data discrepancies including unmetered loads.		30/11/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A weekly QA has been scheduled for the Field team which includes the assessment of the safety net process. A monthly internal audit has also been planned for the Field team which includes the assessment of the safety net process		Ongoing	

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with unmetered load during the period, and assess compliance.

Audit commentary

Flick does not currently supply any ICPs with unmetered load. None of the ICPs with unmetered load temporarily recorded had unmetered load of over 3,000 kWh per annum.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with unmetered load during the period, and assess compliance.

Audit commentary

Flick does not currently supply any ICPs with unmetered load. None of the ICPs with unmetered load temporarily recorded had unmetered load of over 3,000 kWh per annum.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 15.3, Clause 15.37B

Code related audit information

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

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

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

Audit observation

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with unmetered load during the period.

Audit commentary

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

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. The registry list as at 25/09/18 was reviewed to confirm whether Flick had supplied any ICPs with generation during the audit period.

Audit commentary

Metering installations installed

Seven new connections were processed during the audit period. Flick ensured that metering was installed prior to electrical connection.

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

The Authority has approved Flick to apply the HHY profile and HHR submission type for NHH non-AMI meters which will be promptly upgraded to HHR or AMI meters. Flick uses the switch event reading and meter removal read from the NHH meter to quantify consumption for the NHH period.

Distributed Generation

Generation fields are checked weekly as part of Flick's safety net process, discussed in **section 2.1**.

Analysis of the registry list found that Flick supplies 97 ICPs with generation entered by the distributor, all of which have import/export metering installed.

Submission data was checked for the 47 ICPs which had generation recorded by the distributor in May 2018. I verified that injection consumption was correctly reported with flow direction I for 45 ICPs, and 0007115594RN998 did not begin generating until after May 2018. ICP 0007118189RNA4F had generation details added by the distributor on 21/3/18, and injection/export metering was added on 10/9/18. Flick is working with the customer to determine the when generation began. If before the generation metering installation date, Flick intends to provide notification to the reconciliation manager.

The 2017 audit identified that ICP 0007120079RNF70 was expected to have generation installed in the future, and I confirmed that generation metering was installed for this ICP on 22/12/17.

Bridged meters

Flick provided a list of two ICPs where remote disconnection had occurred then the meter had been bridged to reconnect. This is recorded as non-compliance below. I reviewed the bridged meters and noted that they had both later been unbridged. Non-compliance is recorded in **section 8.2** in relation to estimation of consumption during bridged periods.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.1 With: Clause 10.13 and clause 15.2 From: 19-Jan-18 To: 14-Aug-18	Energy is not metered and quantified according to the code where meters are bridged. 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. 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
A refresher training has been held with the data team on the estimation bridged meter process		27/11/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Quarterly internal audit has been scheduled for the data team which includes the assessment of the bridge meter process		Ongoing	

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 to confirm whether Flick is responsible for any GIPs.

Audit commentary

Review of the NSP table confirmed that Flick are not responsible for any GIPs.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

The registry list for 01/12/17 to 25/09/18 was reviewed, to identify any ICPs with profiles that require certification of the control device.

Audit commentary

Examination of the list file found that Flick has only used the HHR and HHY profiles, and control devices are not used for reconciliation purposes.

Audit outcome

Not applicable

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

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

Audit observation

Processes relating to defective metering were examined.

A list of 33 defective meters and two bridged meters were provided. A sample of 15 defective meters and all bridged meters 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, Flick raises a field services job to investigate.

I reviewed 17 examples of potential defective meters, including bridged meters. In all cases a field services job was raised and the MEP advised.

Corrections related to the meter faults are discussed in **section 8.2**.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

- a) ensure the system is to within +/- 5 seconds of NZST or NZDST*
- b) compare the meter time to the system time*
- c) determine the time error of the metering installation*

- d) *if the error is less than the maximum permitted error, correct the meter's clock*
- e) *if the time error is greater than the maximum permitted error then:*
 - i) *correct the metering installation's clock*
 - ii) *compare the metering installation's time with the system time*
 - iii) *correct any affected raw meter data.*
- f) *download the event log.*

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

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

Audit observation

HHR data is provided by MEPs. Interrogation requirements and clock synchronisation were 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 Flick is the trader.

The MEPs provide clock synchronisation information via email, and I viewed examples of these emails for Metrix, Counties Power and AMS meters during the audit. No notifications had been received from Arc, Smartco, or FCLM.

When notifications they are received to determine whether any action is required. No clock synchronisation events requiring action by Flick were identified during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

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

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

Audit observation

The data collection process was examined.

Under their HHY profile, Flick is allowed to temporarily supply NHH non-AMI meters until they are upgraded to HHR or AMI meters. Flick submits the volumes as HHR using their approved HHY profile, and estimates volumes based on the switch event reading and meter removal read from the NHH meter.

While Flick endeavours to ensure that the customer wants to remain with Flick, and that the meter upgrade will be able to be completed, in some cases the ICP switches out before the upgrade is complete. When this occurs Flick uses the customer's photo read and switch in read to calculate an estimated switch out read. The treatment and validation of these photo readings was checked.

Flick also considers photo readings when preparing estimates where actual AMI data cannot be obtained due to communications issues.

Audit commentary

AMI data is provided by MEPS. Validated readings are derived from actual meter readings.

Flick is aware of the requirements to ensure that photo readings are validated against a set of validated actual reading from another source.

I checked six switched ICPs where photo readings had been received and found two photo readings had been treated as a validated readings without being appropriately validated. This is recorded as non-compliance below.

ICP	Switch type	Comment	Outcome
0011270180EL4AB	TR	The photo read was for a period with meter communication issues and was appropriately validated against past AMI reading history and treated as actual.	Compliant
0000598348UNA43	TR	The photo reading was used to help to calculate the estimated switch out reading, but was not treated as actual.	Compliant
0000051220UNB60	TR	An unvalidated photo reading was applied as an actual CS reading where the ICP switched out before a meter upgrade was completed.	Non-compliant
0000505981CE807	TR	The photo reading was used to help to calculate the estimated switch out reading, but was not treated as actual.	Compliant
0001445005UN01A	TR	An unvalidated photo reading was applied as an actual CS reading where the ICP switched out before a meter upgrade was completed.	Non-compliant
0106024167LC508	TR	The photo reading was used to help to calculate the estimated switch out reading, but was not treated as actual.	Compliant

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.6 With: Clause 3(1), 3(2) and 5 Schedule 15.2 From: 07-Aug-18 To: 07-Aug-18	Two photo readings were applied as actual readings in CS files, without being appropriately validated. 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. Flick is aware of the requirement to validate photo read, but I found that they had not consistently been validated. The impact is assessed to be low. NHH ICPs rarely switch out, they are normally either upgraded or withdrawn. It is likely that the photo readings were accurate.		
Actions taken to resolve the issue		Completion date	Remedial action status
The application of the two photo readings as an actual reading in the CS file was a manual data entry error and training has been provided to the Switch team.		5/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A weekly QA has been scheduled for the Switch team which includes assessment of the CS contents A monthly internal audit has also been planned for the switch team which would include the assessment of the CS contents		Ongoing	

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

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

All ICPs have metering category 1 or 2, and are switched as NHH:

- Switch event meter readings in CS files were reviewed in **sections 4.3** and **4.10**.
- Switch event meter readings in RR files were reviewed in **sections 4.4, 4.5** and **4.11**.

Audit commentary

One CS read for ICP 0000005591TR5B9 (**section 4.3**) and one transfer RR read for 0000103542UNF4F (**section 4.4**) were found to be incorrectly recorded. This is recorded as non-compliance below.

Where photo readings are taken, read dates and times are verified against the photo date and time (if available) and information provided by the customer.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.7 With: Clause 6 Schedule 15.2 From: 11-May-18 To: 20-Jun-18	One incorrect CS read and one incorrect RR read were provided. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate, as they are sufficient to ensure that the correct read is applied most of the time. The manual processes to create CS and RR files can result in some data entry errors. The audit risk rating is low, because most reads provided are correctly applied.		
Actions taken to resolve the issue		Completion date	Remedial action status
Refresher training has been provided to the Switch team on 5/12/2018		5/12/2018	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>A weekly QA has been scheduled for the Switch team which includes the assessment of the CS contents and replacement read process</p> <p>A monthly internal audit has also been planned for the switch team which would include the assessment of the CS contents and the replacement read process</p> <p>The CS file automation process is in the testing phase and read replacement process is in the priority list for automation of Flick processes. The automation of these processes will eliminate most of the above issues.</p>	Ongoing	

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

Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters until they are upgraded to HHR or AMI meters.

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with NHH non-AMI metering, and they were checked to determine whether actual readings were obtained during the period of supply.

Audit commentary

Read attainment processes for NHH non-AMI ICPs were reviewed:

- where the upgrade from NHH to AMI metering was successfully completed, Flick received an actual reading during the period of supply
- where a switch was withdrawn before the upgrade was completed, Flick's period of supply was removed, and they were relieved of their obligation to obtain a reading during the period of supply
- where an ICP switched out before the upgrade, Flick used the switch in read and photo reads received from the customer to estimate a CS reading; an actual reading is not obtained during the period of supply unless the switch in read is actual.

I checked the four NHH non-AMI ICPs which switched out before the meter upgrade was complete:

- two ICPs switched in on an actual read, and a read was obtained during the period of supply
- ICPs 0001445005UN01A (supplied 35 days) and 0106024167LC508 (supplied 21 days) switched in on estimated readings, and no validated actual readings were obtained during the period of supply, this is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 6.8</p> <p>With: Clause 7(1) and (2) Schedule 15.2</p> <p>From: 29-Aug-18</p> <p>To: 14-Oct-18</p>	<p>Two NHH metered ICPs did not have a validated read during the period of supply.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are assessed to be strong, as Flick endeavours to complete upgrades or withdraw switches for any NHH ICPs. Switches out during the NHH period are relatively rare.</p> <p>The impact is low because two ICPs were affected and the period of supply was less than 36 days in both cases.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>A Mandatory requirement has been added in the template for NHH Meter replacement service request to contractors to provide existing readings on NHH meters even for failed upgrades. MEP's have been advised of this additional mandatory requirement.</p> <p>The Field and Data team have been retrained on the NHH meter replacement process.</p>		3/12/2018	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>A weekly QA has been scheduled for the Field team which includes the assessment of the NHH meter replacement process.</p> <p>A monthly internal audit has also been planned for the Field team which includes the assessment of this process.</p>		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

Processes for NHH non-AMI read attainment are discussed in **section 6.8**.

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with NHH non-AMI metering.

Audit commentary

Review of the registry list confirmed that no ICPs with NHH non-AMI metering have been supplied for 12 months or more. Meter reading frequency reporting to the Electricity Authority was not required during the audit period.

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

Processes for NHH read attainment are discussed in **section 6.8**.

The registry list for 01/12/17 to 25/09/18 was reviewed to identify all ICPs with NHH non-AMI metering.

Audit commentary

Review of the registry list found one ICP which had NHH non-AMI metering for four months or more. ICP 0000045907CP203 had NHH non-AMI metering from 16/02/18, until it was upgraded on 22/09/18. Validated reads were obtained on switch in on 16/02/18 and when meter was upgraded on 22/09/18. No other validated reads were obtained during the HHR period.

The upgrade appeared delayed because the switch was backdated, it was processed on 03/09/18 with an event date of 16/02/18. Exceptional circumstances applied, and it was not possible for Flick to obtain actual readings or upgrade the meter until the ICP physically switched in. The meter was upgraded within 19 days of the switch being completed.

Meter reading frequency reports were not provided to the Authority for July and August 2018, for where reads were not received during the previous four months of continuous supply. I have recorded compliance with the meter reading frequency reporting requirements because the switch did not complete until 03/09/18, meaning that the ICP was not supplied by Flick when the July submission was due, and had been upgraded by the time the August submission was due.

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

Under their HHY profile, Flick is allowed to temporarily supply NHH non-AMI meters until they are upgraded to HHR or AMI meters. Flick uses the switch event reading and meter removal read from the NHH meter to quantify consumption for the NHH period.

Audit commentary

Flick does not receive readings from NHH meter interrogation logs.

All validated NHH reads are received from incoming CS files, and meter exchange paperwork. Customer photo reads are considered in certain circumstances, as discussed in **section 6.6**.

Audit outcome

Compliant

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

Code reference

Clause 11(1) Schedule 15.2

Code related audit information

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

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

Audit observation

HHR data is provided by MEPs. Compliance was assessed as part of their MEP audits.

Audit commentary

MEPs are responsible for HHR data collection, and compliance is recorded in their audit reports.

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

HHR data is provided by MEPs. Compliance was assessed as part of their MEP audits.

Audit commentary

MEPs are responsible for HHR data interrogation, and compliance is recorded in their audit reports.

Audit outcome

Compliant

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

HHR data is provided by MEPs. Compliance was assessed as part of their MEP audits.

Audit commentary

MEPs are responsible for HHR data interrogation logs, and compliance is recorded in their audit reports.

Audit outcome

Compliant

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

HHR data is provided by MEPs. Compliance was assessed as part of their MEP audits.

Audit commentary

MEPs are responsible for trading period duration, and compliance is recorded in their audit reports.

Audit outcome

Compliant

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

Code reference

Clause 18 Schedule 15.2

Code related audit information

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

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

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

Audit observation

Raw meter data is retained by MEPs, and compliance is assessed as part of their MEP audits.

Processes to archive and store raw meter data were reviewed.

Audit commentary

Compliance is recorded in the MEP audit reports.

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

All meter reading data is archived, and is retained by Flick for at least 48 months. Raw read and volume data from 2014 was viewed during the audit.

I traced a sample of data for six HHR ICPs from the source files to Telemetry and the HHR aggregates files. All volumes matched, confirming that the reads had not been modified.

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

Non metering information is not collected by Flick, therefore compliance was not assessed.

Audit outcome

Not applicable

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

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

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

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

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

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

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

Audit observation

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All ICPs have submission type HHR and this clause does not apply.

Audit outcome

Compliant

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

Code reference

Clause 19(2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

Processes for correction and estimation were reviewed.

A list of 33 defective meters and two bridged meters were provided. A sample of 15 defective meters and all bridged meters were reviewed to confirm the correction process.

Eight corrections for meter changes were checked.

Audit commentary

Errors are identified through the data validation process, missing reads process, or information provided by the customer or MEP.

Where errors are detected replacement data is estimated by Telemetry in accordance with the code. The estimation process is discussed in **section 9.4**.

I reviewed a sample of 17 defective meters and found all the defects related to communications issues which were later resolved. Actual readings take precedence in Telemetry, and estimated data was replaced automatically once actual readings were received.

I reviewed eight corrections relating to meter changes, and found all consumption was accounted for.

Flick provided details of two meters which were unbridged during the audit period. Both were checked:

- one ICP had a correction processed to estimate consumption during the bridged period
- no correction was processed for ICP 0006891497RNC5D, which was bridged from 1/8/18 to 14/8/18, this is recorded as non-compliance below.

The 2017 audit identified that a correction had not been processed for ICP 1000755980UNFB5, which was unbridged on 23/01/2017. I confirmed that a correction has now been processed for consumption during the bridged period.

Flick cannot invalidate and replace actual AMI readings via the Telemetry front end, but can replace estimates and manually entered readings. This can make processing corrections to AMI readings difficult. A recommendation has been raised in **section 4.4** to determine how corrected readings can be applied where AMI data is available.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 8.2 With: Clause 19(2) Schedule 15.2 From: 01-Aug-18 To: 14-Aug-18	A correction was not processed for the period ICP 0006891497RNC5D's meter was bridged. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	The controls are rated as moderate, as most corrections are processed appropriately. Improvement is required to ensure that that corrections for unrecorded consumption during bridged periods is captured. The impact is low, because only one meter was affected.

Actions taken to resolve the issue	Completion date	Remedial action status
Correction has now been processed for the bridged period for ICP 0006891497RNC5D	7/12/2018	Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	
Quarterly internal audit has been scheduled for the data team which includes the assessment of the bridge meter process	Ongoing	

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 as at 25/09/18 was reviewed to identify any ICPs which require loss compensation.

Audit commentary

Flick has only supplied ICPs with metering category 1 or 2. No ICPs have required error or loss compensation.

Audit outcome

Compliant

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

Code reference

Clause 22(1) and (2) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Corrections are discussed in **section 8.2**. I confirmed that raw meter data is not overwritten as part of the correction process. Audit trails are discussed in **section 2.4**.

Raw meter data is collected by MEPs; data retention was reviewed as part of their MEP audits.

Audit commentary

Raw meter data is held by MEPs, and compliance is recorded in their MEP audits.

Flick only corrects working data and they keep an appropriate audit trail. Date, time, operator identifier and the data modified are recorded within the Telemetry system logs.

Additional information such as the reason for the correction is recorded in an Excel spreadsheet of all corrections. Flick uses a standard technique to process corrections.

Retention of raw metering data is discussed in **section 7.2** and audit trails are discussed in **section 2.4**.

Audit outcome

Compliant

9. ESTIMATING AND VALIDATING VOLUME INFORMATION

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

Code reference

Clause 3(3) Schedule 15.2

Code related audit information

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

Audit observation

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

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

Audit commentary

Read types and input methods are recorded in Telemetry. The combination of these fields is sufficient to confirm whether the reads are estimated or actual.

Some reads sent to other traders in switching files were incorrectly classified:

- the CS file for ICP 0000003989TR4CC had an actual switch read entered with a read type of estimate, the correct read type was recorded in Telemetry, it was incorrectly recorded in the CS file due to a data entry error
- photo reads were entered into CS files as actual reads when they had not been appropriately validated for ICPs 0000051220UNB60 and 0001445005UN01A, as discussed in **section 6.6.**

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 9.1 With: Clause 3(3) Schedule 15.2 From: 07-Aug-18 To: 07-Aug-18	Two photo readings were applied as actual readings in CS files, without being appropriately validated. One actual switch read was provided with a read type of estimated. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating
Low	Controls are rated as moderate. The readings were manually entered into the files with an incorrect read type. The impact is assessed to be low. It is likely that the photo readings were accurate, and a small number of read type errors were identified.

Actions taken to resolve the issue	Completion date	Remedial action status
The application of the two photo readings as an actual reading in the CS file was a manual data entry error and training has been provided to the Switch team.	5/12/2018	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>A weekly QA has been scheduled for the Switch team which includes the assessment of the CS contents</p> <p>A monthly internal audit has also been planned for the switch team which would include the assessment of the CS contents</p>	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

Processes for derivation of volumes were discussed and observed.

Audit commentary

All validated NHH reads are received from incoming CS files, and meter exchange paperwork. Customer photo reads are considered in certain circumstances, as discussed in **section 6.6**. Where an ICP switches out during a NHH period, an estimated switch read is provided.

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

Audit outcome

Compliant

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

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

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

Audit observation

A sample of submission data was reviewed in **sections 11** and **12**, to confirm that volume was based on readings as required.

HHR data is collected by MEPs. Compliance was assessed as part of their MEP audits.

Audit commentary

The MEP retains raw, unrounded data. Meter reading data is not rounded or truncated on import.

Audit outcome

Compliant

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

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

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

Audit observation

The HHR estimate process was examined, and a sample of ten estimates were reviewed. Revised data was compared to estimates where the estimates had been replaced.

Audit commentary

Estimates are generated within the Telemetry, and are compliant with the requirements of the code.

Where errors are detected, or data is missing, total volume is estimated based on the information available, and apportioned to trading periods based on historic trading period data for the previous four weeks.

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

Audit outcome

Compliant

9.5. NHH metering information data validation (Clause 16 Schedule 15.2)

Code reference

Clause 16 Schedule 15.2

Code related audit information

Each validity check of non half hour meter readings and estimated readings must include the following:

16(2)(a) - confirmation that the meter reading or estimated reading relates to the correct ICP, meter, and register

16(2)(b) - checks for invalid dates and times

16(2)(c) - confirmation that the meter reading or estimated reading lies within an acceptable range compared with the expected pattern, previous pattern, or trend

16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected zero values.

Audit observation

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All NHH ICPs have HHR consumption estimated during the NHH period. This consumption is subject to the HHR validation process described in **section 9.6**.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

I reviewed the HHR data validation process, including meter event logs, validation checks, and the sum-check process.

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

Audit commentary

Electronic meter reading information is provided by MEPs. Meters are interrogated regularly, and there is little risk that data can be overwritten. Data is held for a longer period at the meter and can be re-interrogated later if required.

Telemetry validates data on import. The validation includes:

- checks for missing data; and
- checks for invalid dates and times.

Any files that fail to import, or are imported with errors, are checked.

ICPs with zero consumption billed for the week are checked weekly. If zero consumption persists for more than four weeks without a known and valid reason, action is taken to check the meter.

Comparison with expected or previous consumption is checked as part of the bill validation process. Any anomalies are investigated by Flick, and the meter is checked if necessary.

AMS, FCLM and Arc compare meter readings against half hour interval data, known as the sum-check process. Flick conducts the sum-check process for Metrix data. Flick is the owner of the HHY profile, which allows HHR data to be submitted although the meters are certified as NHH. Metrix supplies midnight reads and HHR data, which are compared in Telemetry to ensure there is no difference between midnight reads and the total of the 48 trading periods. Midnight reads are still unavailable for three phase ICPs, and Flick manually derives midnight reads based on the 9pm NZST reads and interval data received from Metrix, and enters them into Telemetry so that the sum-check can be completed. I viewed the validation reports for the sum-check, which most commonly fails where there are missing trading periods and in these cases Telemetry estimates replacement data. Where data is available for all trading periods and the sum check is not within ± 1 kWh, the ICP is queried with the MEP.

Meter event reports are provided by AMS, Smartco, and Metrix. The reports are imported into Telemetry and reviewed weekly to identify events that require investigation or action. AMS and Metrix also send emails to Flick where they require field services jobs to be raised.

Metrix reviews meter event data for Counties Power, and advises Flick if any events occur that affect the accuracy of meter data or action is required. Arc also review their own meter event information, and email events that require action to Flick. I saw evidence of this process.

FCLM recently began providing meter event logs and information to Flick via email when issues that require action occur.

Audit outcome

Compliant

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

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

Code reference

Clause 13.136

Code related audit information

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

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

Audit observation

The NSP table on the registry was reviewed.

Audit commentary

Flick 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

Flick 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

Flick 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

Flick 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

Processes to create buying and selling notifications were reviewed.

A registry list for 01/12/17 to 25/09/18 was reviewed confirm the profiles used.

Audit commentary

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

Flick also uses the HHY profile, which allows HHR data from NHH and NHH AMI metering installations to be submitted as HHR.

Before beginning trading at each NSP, a notification is provided to the reconciliation manager as part of Flick's process to create new NSPs in their system.

Flick began trading four NSPs using the HHY profile during the audit period. HHR trading notifications were already open for these NSPs prior to beginning to use the HHY profile. Because there is no facility to enter the profile on the RM portal, no trading notification was issued. This is recorded as technical non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 11.1 With: Clause 15.3 From: 06-Jan-18 To: 09-Jul-18	No trading notification was provided for HHY profile for BRB0331, MTO0331, MPE1101 or TQB0011. Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating		
Low	There is no impact. The reconciliation manager's system recorded the profile correctly, and the notification process does not allow the trader to enter the profile.		
Actions taken to resolve the issue		Completion date	Remedial action status
This technical non-compliance has been raised with EA and any action if any will be taken on their recommendation.		7/12/2018	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Participant comments Awaiting response from EA for any suggested actions.		ongoing	

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 15 NSPs with a small number of ICPs to confirm the AV110 ICP days calculation was correct.

I reviewed variances for 25 months of GR100 reports. A sample of 44 variances were reviewed to determine the cause of the variance.

Audit commentary

Flick's AV110 reports are produced from Telemetry's MDM usage reporting, which combines Telemetry's volume information and registry information to ensure that aggregation is correct. Registry information is updated in MDM daily.

The process for the calculation of ICP days was examined by checking 15 NSPs a small number of ICPs on the August 2018 ICP days submission, against the active days for ICPs connected to the NSP on the registry list with history. The ICP days calculation was confirmed to be correct for the sample checked.

GR100 ICP comparison reports are reviewed by Flick, and discrepancies are investigated. The GR100 differences for the past 25 months are set out below.

ICP Days difference between the registry and Flick database

(Positive = Flick data is lower than that on the registry).

Month	R0	R1	R3	R7	R14
Aug 2016	-	-	-	-	-0.02%
Sep 2016	-	-	-	-	0.02%
Oct 2016	-	-	-	-	-0.14%
Nov 2016	-	-	-	-	0.11%
Dec 2016	-	-	-	-	0.12%
Jan 2017	-	-	-	-	0.25%
Feb 2017	-	-	-	-	0.16%
Mar 2017	-	-	-	-0.02%	0.18%
Apr 2017	-	-	-	-0.08%	-0.06%
May 2017	-	-	-	-0.02%	0.03%
Jun 2017	-	-	-	-0.03%	0.01%
Jul 2017	-	-	-0.03%	0.02%	0.03%
Aug 2017	-	-	-0.03%	0.05%	-
Sep 2017	0.17%	-0.02%	-0.02%	0.05%	-
Oct 2017	-0.10%	-0.13%	-0.05%	0.00%	-
Nov 2017	-0.01%	-0.04%	0.00%	0.01%	-
Dec 2017	0.00%	0.01%	0.00%	0.01%	-

Month	R0	R1	R3	R7	R14
Jan 2018	0.37%	0.34%	0.08%	0.06%	-
Feb 2018	0.28%	-0.03%	0.02%	0.01%	-
Mar 2018	0.07%	0.01%	0.00%	-	-
Apr 2018	0.07%	0.04%	0.00%	-	-
May 2018	0.06%	0.04%	0.01%	-	-
Jun 2018	0.11%	0.07%	0.01%	-	-
Jul 2018	0.16%	0.13%	-	-	-
Aug 2018	0.09%	0.07%	-	-	-

I reviewed a sample of 44 ICP days discrepancies and found the following reasons for ICP days differences:

- NSP changes which were not processed from the correct date in the Data Repository. Telemetry imports registry information to ensure that aggregation factors are correct and wash up submissions should be correct for these ICPs.
- Submission type discrepancies on the registry for NNH ICPs using the HHY profile. ICP days submission was correct, but the submission type discrepancies are recorded as non-compliance in **section 2.1**.
- ICPs that have not received readings after switching in are not reported. Missing trading period data is populated based on actual or estimated readings entered into Telemetry. Where an ICP switches in and no readings are received, no estimates will be calculated and no ICP days will be reported. Once AMI data is received, or a removal read is received for an upgrade, missing data will be populated and the ICP days will be reported.
- Backdated switches, withdrawals, and status updates. Late switching files are discussed in **section 4**, and late registry updates are discussed in **section 3**.

The 2017 audit found two issues with the reporting of ICP days:

- The AV110 report is expected to include active ICP days only. Inactive ICP days were included in the AV110 report, if an ICP was inactive and active during the month reported. If an ICP was inactive for the whole month, the inactive ICP days were correctly omitted from the AV110 report. I followed up the over reporting of ICP days for July 2017 of eight days at TSP0011, and two days at OPK0331 and found both had been corrected in revision submissions.
- If ICP days had been reported in a previous revision, but are not required in a later revision due to a backdated switch out or switch withdrawal, Flick did not submit a zero line in the AV110 report. I found no evidence of recurrence of this issue during the audit.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.2 With: Clause 15.6 From: 01-Apr-18 To: 16-Nov-18	ICP days are not provided for new ICPs until readings are entered after the switch in read. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong as they are sufficient to ensure that most data is correctly reported. For a small subset of new switch ins, ICP days will not be provided until actual readings are received. The impact is assessed to be low, as updated data will be provided through the revision process.		
Actions taken to resolve the issue		Completion date	Remedial action status
This issue has been raised with the Tech team and an attempt will be made to resolve this non-compliance through system enhancement .		Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
The initial incorrect submission of ICP days would be corrected through the revision files.		Ongoing	

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.

GR130 reports for September 2015 to August 2018 were reviewed to confirm whether the relationship between billed and submitted data appears reasonable.

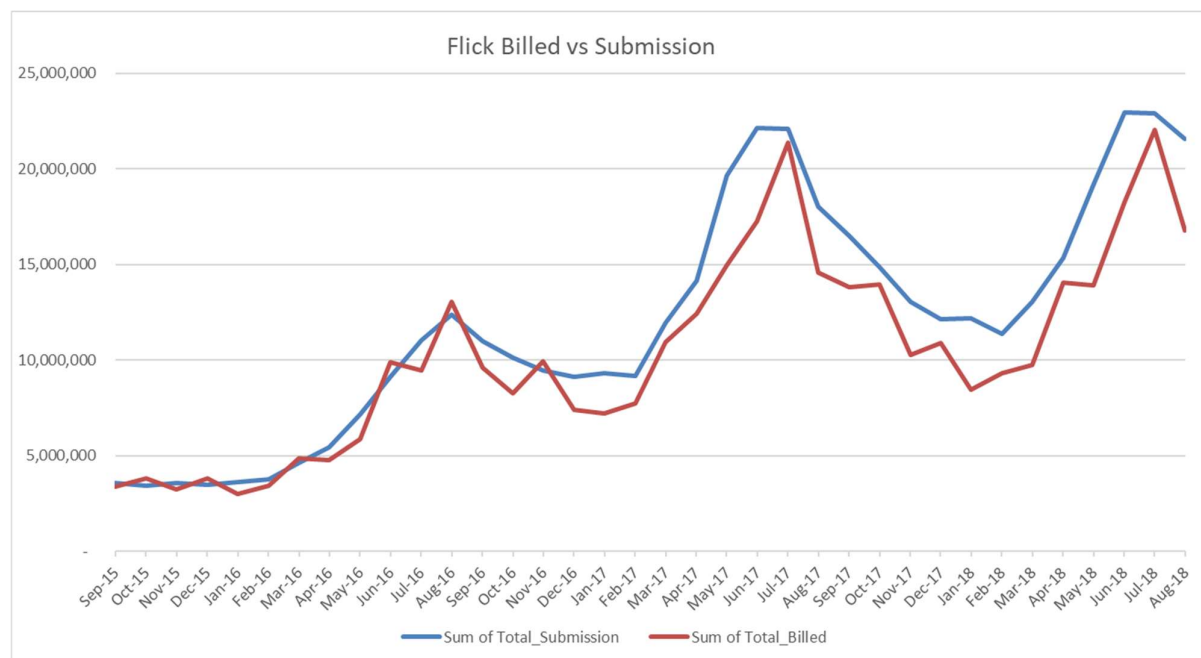
Audit commentary

Previous audits have raised concerns about the difference between as billed and submission data, and recommended Flick investigate to determine the reasons for these differences.

Flick has completed comparisons between the weekly billed data in AXOS for each month and the total submitted on the AV120 reports, and found there were significant differences. Flick and AXOS have investigated the differences, but have not been able to determine the root cause. Non-compliance is recorded because the AV120 report does not consistently reflect the invoiced volumes.

I checked the difference between submission and electricity supplied information for a 36 month period, and the results are shown in the chart below. The total difference is -19% for the two years ended August 2018 and 21% for the year ended August 2018 (billed lower than submission). This difference is higher than expected and has increased over time. It appears to be caused by the AV120 accuracy issues.

Comparison between Submitted Volumes and Electricity Supplied



Flick plans to make a material change to the way they produce the AV120 report, producing it from their usage reporting system instead of directly from AXOS. A material change audit will be completed prior to the new report's implementation.

I viewed test results to date and noted that the test AV120 report was consistent with weekly billing data and individual customer invoices produced in AXOS, and also much more consistent with the submitted data. I checked the differences between billed and submitted data for July to August 2018 and found the current reporting resulted in a difference of -18.07% across this period (billed lower than submitted), and the test reporting resulted in a difference of -0.56% (billed lower than submitted).

Given the close relationship between the raw AXOS billed data and the submission data, I do not have concerns that the current differences between the AV120 and submission data indicate that the HHR volumes reported are inaccurate. The inaccuracy appears to lie with the current AV120 report.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.3 With: Clause 15.7 From: 01-Dec-17 To: 16-Nov-18	The AV120 report does not consistently reflect the quantity billed for the period. 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. Past testing of the AV120 confirmed that it does match invoice data for the samples checked, but there appear to be some issues with the report logic which are causing discrepancies. The impact is assessed to be low, because there is no impact on settlement.		
Actions taken to resolve the issue		Completion date	Remedial action status
It was identified that the AV120 discrepancy was due to issues with system reporting. A replacement AV120 report which has been built to report from rating is in the testing phase. A material change audit is scheduled to be completed before the new report is implemented.		1/3/2018 (estimated time)	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The issue with AV120 discrepancy will be resolved once the new report is completed and approved.		1/3/2018 (estimated time)	

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

Code reference

Clause 15.8

Code related audit information

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

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

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

Audit observation

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

The GR090 ICP missing files received during the audit period for July 2016 to August 2018 were examined. A sample of 35 missing ICPs were reviewed to determine the reasons they were missing.

Audit commentary

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

I confirmed the process for aggregation of HHR data is correct, by:

- matching HHR aggregates information to the volumes for nine submissions, which confirmed that the differences between the volumes and aggregates were small - a detailed reconciliation at NSP level was completed for one submission which confirmed that the differences were very small at each NSP and related to rounding
- matching HHR aggregates volumes to the source files received from the MEP for six ICPs - I found that the volumes matched
- checking 117 ICPs with vacant consumption in May 2018 to confirm that vacant consumption is reported - all ICPs with consumption while disconnected had been returned to active status or switched out.

Flick reviews all GR090 (ICP missing) reports and investigates and corrects any data discrepancies. The GR090 ICP missing files received during the audit period for July 2016 to August 2018 were examined. A sample of 35 differences were reviewed, and found to be caused by:

- NSP changes which were not processed from the correct date in the Data Repository. Telemetry imports registry information to ensure that aggregation factors are correct and wash up submissions should be correct for these ICPs.
- Submission type discrepancies on the registry for NNH ICPs using the HHY profile. Submission was correct, but the submission type discrepancies are recorded as non-compliance in **section 2.1**.
- ICPs that have not received readings after switching in are not reported. Missing trading period data is populated based on actual or estimated readings entered into Telemetry. Where an ICP switches in and no readings are received, no estimates will be calculated and no ICP days will be reported. Once AMI data is received, or a removal read is received for an upgrade, missing data will be populated and the ICP days will be reported. The ICP missing review identified six ICPs with missing data because of this issue.
- Backdated switches, withdrawals, and status updates. Late switching files are discussed in **section 4**, and late registry updates are discussed in **section 3**.

I also reviewed Flick's volumes and aggregates for September and October 2018 for reasonableness, and did not find any evidence of under submission of volumes for these months.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 11.4</p> <p>With: Clause 15.8</p> <p>From: 01-Dec-17</p> <p>To: 16-Nov-18</p>	<p>HHR aggregates file does not contain electricity supplied information.</p> <p>Estimated submission data is not provided for new ICPs with no readings entered after the switch in read.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as strong as they are sufficient to ensure that most data is correctly reported. For a small subset of new switch ins, estimated data will not be provided until actual readings are received.</p> <p>The impact is assessed to be low, as updated data will be provided through the revision process.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
A process change will be recommended together with system change to incorporate estimates from the switch in date if data is unavailable.		ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This change in process will ensure that HHR aggregates file include estimated electricity volume information.		ongoing	

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

HHR data is provided by MEPs. Compliance was assessed as part of their MEP audits.

The daylight savings adjustment process was reviewed for each MEP, including viewing examples of ICPs moving into and out of daylight savings.

Audit commentary

Daylight savings processes for the MEPs were reviewed as part of their audits, and found to be compliant.

I viewed the adjustment process in Telemetry. I checked a sample of ICPs to confirm that where data is provided in NZST, Telemetry adjusts the data during the daylight savings period using the trading period run on technique.

Audit outcome

Compliant

12.2. Creation of submission information (Clause 15.4)

Code reference

Clause 15.4

Code related audit information

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

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

Audit observation

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

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

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

Audit commentary

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

I checked the accuracy of the HHR aggregates and HHR volumes files in **section 11.4** and confirm compliance. NHH ICPs have HHR consumption estimated during the NHH period.

Audit outcome

Compliant

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

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

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

The internal audit process was discussed, and internal audit reporting was reviewed.

Audit commentary

Flick has validation processes to ensure that submissions are correct, including:

- comparison between the volumes and aggregates files; and
- checks of any ICPs where no data has been received since switch in, with action taken to retrieve data before the next revision where possible.

Flick's Data Repository, which did not automatically apply multipliers, has been replaced with Telemetry. I confirmed that Telemetry automatically applies multipliers correctly.

Reconciliation processes have been subject to a Flick internal audit, which found some minor issues relating to generating installations not being identified which have been addressed through training. Reconciliation process internal audits are scheduled to occur annually.

Audit outcome

Compliant

12.4. Grid owner volumes information (Clause 15.9)

Code reference

Clause 15.9

Code related audit information

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

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

Audit observation

Review of the NSP table confirmed that Flick is not a grid owner.

Audit commentary

Review of the NSP table confirmed that Flick is not a grid owner, and is not required to submit grid owner volume information.

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

A registry list was reviewed to confirm Flick does not own any local or embedded networks.

Audit commentary

Flick is not required to provide NSP submission information.

Audit outcome

Not applicable

12.6. Grid connected generation (Clause 15.11)

Code reference

Clause 15.11

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

Flick is not a grid connected generator, therefore 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 **sections 8.1 and 8.2**.

Audit commentary

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

The following issues which impacted on the accuracy of volume information submitted to the reconciliation manager were identified.

- HHR profile was invalidly recorded on the registry and applied for submission for 46 ICPs for periods without certified HHR metering. The HHY profile should be applied for the NHH period. Flick is working through correcting the profiles for the affected ICPs, and I saw evidence that this process is underway.
- Where an ICP switches in and no readings are received, no estimates will be calculated. Once AMI data is received, or a removal read is received for an upgrade, any missing trading periods

will be populated according to Telemetry's estimation process. In the meantime no consumption is estimated for the ICP and no ICP days are reported.

- Flick's current processes for switch event readings can result in Flick applying a different read to the other trader, as discussed in **sections 4.4, 4.5 and 4.11**. I found 27 ICPs where the reads applied by Flick did not reflect the agreed switch reading, resulting in net under reporting of 1,192 kWh for the affected ICPs.
- Flick has no ability to submit volumes for unmetered load. No unmetered volumes were submitted for ICPs 0005253993RN7CD and 0005313244RNBB2 which had unmetered load for part of the audit period, resulting in under submission of 3.7 kWh.
- A correction was not processed for the period ICP 0006891497RNC5D's meter was bridged, as described in **section 8.2**.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 12.7</p> <p>With: Clause 15.12</p> <p>From: 01-Dec-17</p> <p>To: 16-Nov-18</p>	<p>Some submission information was incorrect, due to a correction not being processed, some volumes not being based on agreed switch readings, and not providing estimates where actual data was unavailable in some cases.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>Controls are rated as moderate as they are sufficient to ensure that submission data is accurate most of the time.</p> <p>The audit risk rating is low, because submission information can be corrected washed up through the revision process.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>The incorrect profiles recorded for the 46 ICPs identified through this audit has been corrected.</p> <p>Correction has been processed for the bridged period for ICP 0006891497RNC5D</p>		5/12/2018	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Refresher training has been completed for the Data and Switch team which included training:</p> <ul style="list-style-type: none"> • Bridge meter process • Safety net – identification of unmetered load and switching out as of event date • Application of Correct profiles in registry • Read replacement process <p>All of the above process has been included to be assessed through the weekly QA and monthly internal audit.</p>	5/12/2018	

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

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All ICPs were submitted as HHR, and this clause does not apply.

Audit outcome

Not applicable

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 Flick's ICPs have metering category 1 or 2, and are submitted as HHR
- no ICPs with unmetered load are supplied
- no profiles requiring a certified control device are used
- no loss or compensation arrangements are required
- aggregation of the AV090 and AV140 reports is compliant.

Audit outcome

Compliant

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

Code reference

Clause 3 Schedule 15.3

Code related audit information

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

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

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

Audit observation

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All ICPs were submitted as HHR, and this clause does not apply.

Audit outcome

Not applicable

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All ICPs were submitted as HHR, and this clause does not apply.

Audit outcome

Not applicable

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 Schedule 15.3

Code related audit information

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

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

Audit observation

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All ICPs were submitted as HHR, and this clause does not apply.

Audit outcome

Not applicable

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

Code reference

Clause 7 Schedule 15.3

Code related audit information

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

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

Audit observation

Review of the registry list for 01/12/17 to 25/09/18 and discussion with Flick confirmed that all ICPs had submission type HHR.

Review of the event detail report for 01/12/17 to 25/09/18 confirmed that no ICPs have had a profile change.

Audit commentary

All ICPs were submitted as HHR, and no ICPs have had profile changes. The profile corrections discussed in **section 2.1** were not completed during the event detail report period.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

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

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

Audit observation

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

Aggregation of HHR volumes is discussed in **section 11.4**.

Audit commentary

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

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

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 AV090 and AV140 reports as part of the aggregation checks.

Audit commentary

Submission information is appropriately rounded to no more than 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

Flick has not submitted any NHH volumes. Using the HHY profile, Flick has temporarily supplied NHH non-AMI meters as HHR until they are upgraded to HHR or AMI meters.

Audit commentary

All ICPs were submitted as HHR, and this clause does not apply.

Audit outcome

Not applicable

CONCLUSION

There have been several changes during the audit period:

1. Flick replaced the Data Repository with Telemetry in April 2018, which has resulted in many improvements including automated application of meter multipliers. Flick intends to automate some switching processes in Telemetry, and CS automation is currently being tested.

This audit has considered both systems and the whole audit period, with a focus on Telemetry when assessing the adequacy of controls and processes in place.

2. The Authority has approved Flick to apply the HHY profile and HHR submission type for NHH non-AMI meters which will be promptly upgraded to HHR or AMI meters. Flick uses the switch event reading and meter removal read from the NHH meter to quantify consumption for the NHH period.

While Flick endeavours to ensure that the customer wants to remain with Flick, and that the meter upgrade will be able to be completed, in some cases the ICP switches out before the upgrade is complete. Where this occurs, Flick uses the customer's photo read and switch in read to calculate an estimated switch out read.

The upgrade process has caused some compliance issues for Flick, relating to incorrect submission types and profiles being recorded on the registry, read attainment during the period of supply, read validation, and CS file content. A small number of ICPs are affected by these issues; less than 50 NHH non-AMI meters have been supplied during the audit period. Upon becoming aware of these issues, Flick stopped accepting NHH non-AMI ICPs and will resume the process once compliant procedures are in place.

3. Flick has implemented an internal audit regime; switching, registry and field services, and reconciliation internal audits have been carried out over the past year. Through these audits, improvements have been identified and implemented. The frequency of follow up internal audits are scheduled based on the findings of each audit.

Flick has continued to improve their registry validation processes and have worked hard to ensure that all connected and reconnected meters were appropriately certified.

Significant effort has been put into cleansing ANZSIC codes since the previous audit, and many of the late registry updates related to corrections.

Application of readings where agreed switch readings differ from actual AMI data continues to be an issue for Flick. Telemetry does not allow actual AMI meter readings to be replaced, which makes applying agreed switch readings which differ from AMI readings difficult in some cases. In addition, where differences between switch reads and AMI data are less than ± 5 kW or confirmed more than five business days after switch in reads, are not normally renegotiated and Flick applies their AMI data for reconciliation.

The difference between as billed and submitted volumes continues to be larger than expected. Flick has confirmed that their as billed reports contain some inaccurate data, and a replacement report is currently being tested. A material change audit is scheduled to be completed before the new report is implemented.

- Internal audit processes have been implemented, and a full cycle of audits have been completed this year. Opportunities for improvement have been identified and are being followed through.
- Several non-compliances are cleared, or in the process of being cleared, including all instances of incorrect registry information.

- System changes to improve compliance are underway including automation of switching processes, and replacement of the AV120 report.
- Several non-compliances relate to the small number of ICPs which where meters were upgraded from NHH non-AMI to HHR or AMI. Flick took action to prevent further non-compliance relating to NHH non-AMI ICPs, by not accepting NHH non-AMI ICPs until compliant procedures are in place.
- Four non-compliances have been cleared, and corrective actions are being investigated for two very minor non-compliances. The remaining non-compliances had corrective actions identified and underway prior to the audit report being finalised.

I recommend that the next audit is completed in 12 months, to allow Flick time to fully implement their corrective actions and demonstrate improved compliance.

The matters raised are shown in the tables below:

PARTICIPANT RESPONSE

We take regulatory compliance very seriously and are pleased with the level of detail and reporting throughout the audit process. Our operation teams enjoy the audit process and see it as a great opportunity to learn more about regulatory compliance and the Code.

While every effort is made to ensure that we meet our regulatory obligations under the code, non-compliances do occur due to manual data entry errors or system constraints.

To minimise these non-compliances, we have implemented an internal audit regime which incorporates our regulatory requirements. The internal audit focuses on improvements, training and implementing internal controls to prevent further occurrence of the non-compliances identified.

Given the nature of our business model and the stresses in the market over the audit period there has been significant additional pressure on our operational teams which has contributed to some of the manual errors identified during the audit.

We will improve our compliance going forward through:

- Automation of back-end processes and continued improvements to our Telemetry system;
- Implementing a more robust QA process over the business functions regulated by the code; and
- Continued focus on continuous improvement through our internal audit programme.

We look forward to your next visit.