

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT



For

ECOTRICITY SUPERCEDED LIMITED (NZBN:
4759299)

Prepared by: Steve Woods

Date audit commenced: 29 June 2021

Date audit report completed: 29 July 2021

Audit report due date: 01 August 2021

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EXECUTIVE SUMMARY

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

Since the previous audit, Ecotricity has resolved most of the submission inaccuracy issues. Validation has improved and issues are being identified and resolved in a shorter timeframe. Switching and registry compliance has also improved during the audit period.

There are three new non-compliances that require urgent attention, as follows:

1. Email correspondence to customers intending to switch away asks for reasons for switching, which the Code does not allow.
2. Utilities Disputes information is not present on the website or in outbound communications.
3. Powerswitch information is not present in communications.

Many of the other non-compliances are expected to be remedied as Ecotricity continues to improve processes and reporting. The audit found 29 non-compliance issues, four recommendations are made, and no issues are raised. The audit risk rating is 70, indicating that the next audit be due in three months. Now that Ecotricity has stronger processes in place to ensure revisions are conducted, I recommend the next audit is conducted in nine months, to ensure as much resource as possible is available to continue with improvements.

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	11.2	Some registry discrepancies exist. Several scenarios leading to incorrect submission information. Inaccurate HHR data where ARC is the MEP due to having only one decimal place.	Moderate	Medium	4	Identified
Electrical Connection of Point of Connection	2.11	10.33A	ICP 0000190215TRA73 was not certified within five business days of reconnection.	Weak	Low	3	Identified
MEP arrangements.	2.13	10.36	MEP arrangement is not in place with WEL Networks.	Moderate	Low	2	Identified
Meter bridging	2.17	10.33C and 2A of Schedule 15.2	Correction has not occurred for ICP 0000572387NRFFB for the bridged period.	Weak	Low	3	Identified
Provision of information on dispute resolution scheme.	2.19	11.30A	Utilities Disputes information is not present on the website or in outbound communications.	Weak	Low	3	Identified
Provision of information on electricity plan comparison site	2.20	11.30B	Powerswitch information is not present in communications.	None	Low	5	Identified
Changes to registry information	3.3	10 of Schedule 11.1	21 late updates to active status. Three late updates to inactive status. 149 late trader updates.	Moderate	Low	2	Identified
Provision of information to the registry manager	3.5	9 Schedule 11.1	11 late status updates to active for new connections.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
ANZSIC codes	3.6	9 (1)(k) of Schedule 11.1	At least 10 incorrect ANZSIC codes.	Moderate	Low	2	Identified
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	One CS breach for a transfer switch. Incorrect average daily consumption for one ICP.	Moderate	Low	2	Identified
Retailers must use the same readings	4.4	6(1) of Schedule 11.3	Incorrect (but accurate) readings used for three ICPs.	Strong	Low	1	Identified
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	Five T2 breaches for switch moves. Two ET breaches for switch moves. One CS breach.	Strong	Low	1	Identified
Losing trader determines a different date - switch move	4.9	10(2) Schedule 11.3	Two ET breaches for switch moves.	Strong	Low	1	Identified
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	Incorrect daily kWh for one ICP.	Strong	Low	1	Investigating
Gaining trader changes to switch meter reading – switch move	4.11	12 of Schedule 11.3	Incorrect (but accurate) readings used for one ICP.	Strong	Low	1	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	One NA breach. One NW breach.	Strong	Low	1	Identified
Switch saving protection	4.17	11.15AA to 11.15AB	Correspondence to switching customers requests reasons for switching.	Moderate	Low	2	Cleared

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Electricity conveyed & notification by embedded generators	6.1	10.13, Clause 10.24 and 15.13	Submission had not occurred for 27 ICPs with embedded generation and the RM was not notified of gifting. Two ICPs bridged during the audit period.	Weak	Low	3	Identified
Interrogate meters once	6.8	7(1) and (2) Schedule 15.2	Nine ICPs not read during the period of supply.	Weak	Low	3	Identified
NHH meters interrogated annually	6.9	8(1) and (2) Schedule 15.2	Best endeavours not met for four ICPs not read in the 12-month period.	Weak	Low	3	Identified
NHH meters 90% read rate	6.10	9(1) and (2) Schedule 15.2	Two ICPs not read in the 4-month period.	Weak	Low	3	Identified
Meter data used to derive volume information	9.3	3(5) of schedule 15.2	AMS and EDM's EIEP3 file format rounds trading period data to 2 decimal places.	Moderate	Low	2	Investigating
Electronic meter readings and estimated readings	9.6	17 Schedule 15.2	Event logs not routinely checked.	Moderate	Low	2	Identified
Electricity supplied information provision to the reconciliation manager	11.3	15.7	Electricity supplied file incorrect for NSP SOH0011. Incorrect electricity supplied for May 2020.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
HHR aggregates information provision to the reconciliation manager	11.4	15.8	<p>HHR aggregates file does not contain electricity supplied information.</p> <p>Errors in aggs file between March and December 2020.</p> <p>Under submission of 18,107.6 kWh due to ICPs missing from aggs file.</p> <p>1,600 kWh not included in R-14 for an inactive ICP with consumption.</p>	Moderate	Medium	4	Identified
Creation of submission information	12.2	15.4	<p>Errors in aggs file between March and December 2020.</p> <p>Under submission of 18,107.6 kWh due to ICPs missing from aggs file.</p> <p>1,600 kWh not included in R-14 for an inactive ICP with consumption.</p> <p>Submission of 576 kWh yet to occur for two inactive NHH ICPs with consumption.</p> <p>NHH generation kWh not submitted at the earliest opportunity.</p> <p>Some incorrect and late files as shown in the breach report.</p>	Moderate	Medium	4	Identified
Accuracy of submission information	12.7	15.12	<p>The most accurate data is not submitted in submission files when the following issues are identified:</p> <ul style="list-style-type: none"> • missing ICPs, • additional ICPs, • consumption on inactive ICPs, and • generation present at ICPs. 	Moderate	Medium	4	Identified
Permanence of meter readings for reconciliation	12.8	4 Schedule 15.2	Estimates not all replaced by the 14-month revision.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Historical estimate reporting to RM	13.3	10 Schedule 15.3	Historic estimate thresholds were not met for some revisions.	Moderate	Low	2	Identified
Future Risk Rating						70	

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

RECOMMENDATIONS

Subject	Section	Clause	Recommendation
ANZSIC codes	3.6	9 (1)(k) of Schedule 11.1	Check the audit compliance report is reviewed regularly to identify incorrect ANZSIC codes. Improve validation at the time of customer registration.
Distributed generation	6.1	10.13, Clause 10.24 and 15.13	Conduct regular checks of reporting to identify DG discrepancies.
HHR estimates	9.4	15 Schedule 15.2	Report on quantity of estimated HHR data per month per MEP for each revision
NHH validation	9.5	16 Schedule 15.2	Add an additional NHH validation for changes from consumption to zero consumption for consecutive periods.

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

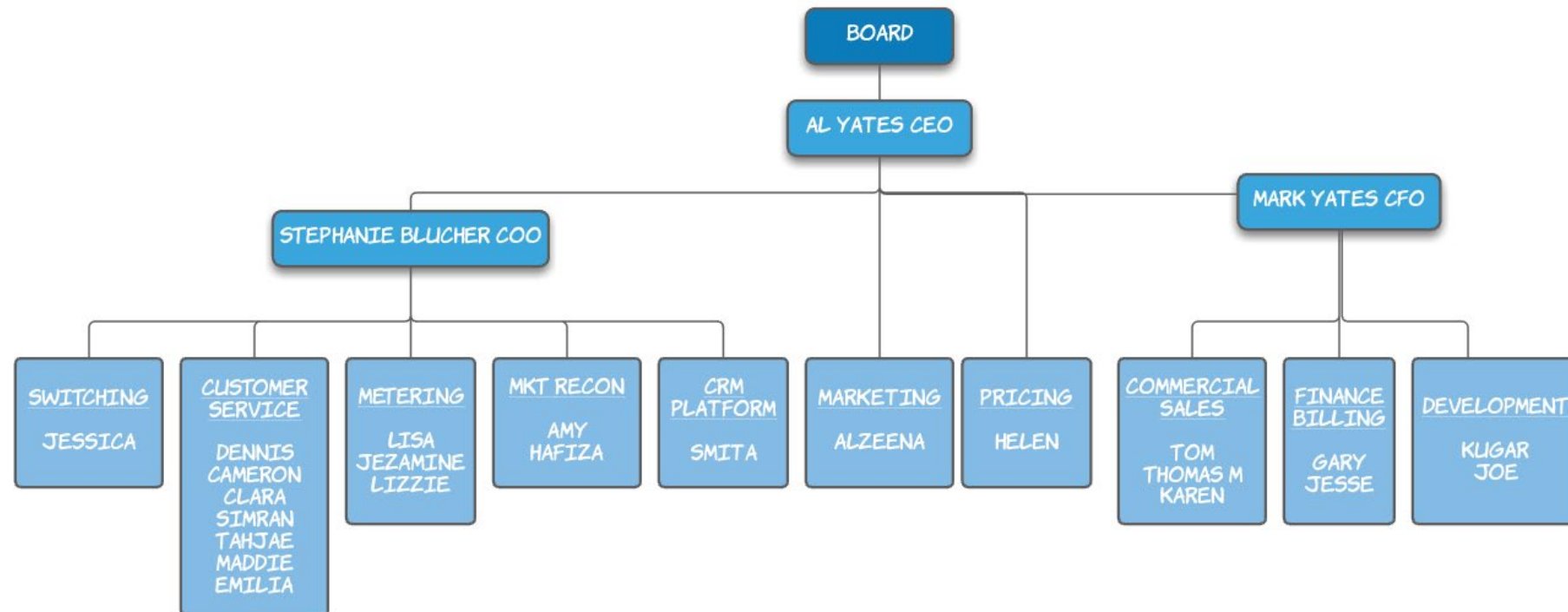
Current code exemptions were reviewed on the Electricity Authority website.

Audit commentary

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

1.2. Structure of Organisation

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



1.3. Persons involved in this audit

Auditor:

Steve Woods

Veritek Limited

Electricity Authority Approved Auditor

Ecotricity personnel assisting in this audit were:

Name	Title
Al Yates	Chief Executive Officer
Stephanie Blucher	Chief Operating Officer
Hafiza Rezaie	Market Reporting Analyst
Jessica Inners	Switching Specialist
Cameron Gumtau-Ryan	Switching Specialist
Dennis Mckechnie	CS Operations Manager
Lisa Anderton	Metering Team Leader

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

Ecotricity receives HHR data from MEPs, who are subject to their own audit regime and are not considered agents. Wells provides ad hoc NHH manual reads and is considered an agent. EDM I and AMS provide HHR data as agents.

Audit commentary

Ecotricity receives HHR data from MEPs, who are subject to their own audit regime and are not considered agents. Wells provides ad hoc NHH manual reads and is considered an agent. EDM I and AMS provide HHR data as agents.

All agent reports were conducted within the last seven months.

1.5. Hardware and Software

Ecotricity uses the robotron*esales system. This is a cloud-based application, written and maintained by Robotron NZ.

The database is stored in Sydney where it is regularly backed up. There is also a copy of raw metering data stored in NZ.

1.6. Breaches or Breach Allegations

There were four alleged breaches relevant to the scope of this audit during the audit period. The breaches are shown in the table below.

Reference	Status	Result	Clause(s)	Summary
2101ECOT1	closed	early closure	Part 15 clause 15.12	ECOT was notified of an incorrect AV-090 HHRVOLS submission on the Y LINE NSP for the August 2019 R14 revision. ECOT resubmitted their data at 10:40am on the 20th of October.
2104ECOT3	fact finding	no result yet	Part 15 clause 15.2 (1) (a)	Ecotricity (ECOT) failed to deliver accurate information to the reconciliation manager in their AV-090 (HHR submission file). RM noticed that in the volume change from R3 to R7 for their September 2020 submission changed a lot in their HHR volumes submission. RM reached out to ECOT to confirm that the change in submission volume was as intended. ECOT notified RM that there was an error in their system and that there were two NSPs; BRY0661 and HOB1101. As a result, ECOT was missing around 500,000kWh of volume from their submission between both NSPs.
2105ECOT1	fact finding	early closure	Part 15 Schedule 1 5.4 (1)	ECOT failed to submit information to the reconciliation manager by 1600 hours on the 4th business day of the reconciliation period.
2105ECOT2	draft	no result yet	15.2(1)(a) Requirement to provide complete and accurate information	Ecotricity Limited (ECOT) failed to provide accurate information to the reconciliation manager. ECOT was notified by the RM on 20/05/2021 about unusual changes in volumes for their NHH I flows for 202003 R14. After investigation ECOT confirmed the volumes submitted were incorrect due to their system's high estimation of volumes. Rules: 15.2(1)(a) Requirement to provide complete and accurate information

1.7. ICP Data

Active ICPs are summarised by meter category in the table below. Three of the six active ICPs with a metering category of 9 or blank have trader unmetered load details recorded, and two have MEP nominations accepted and are awaiting asset data. The other ICP is active but has no metering details entered on the registry and is discussed in **section 2.9**.

Metering Category	May 2021	Nov 2020	Mar 2020	2019	2018
1	9,034	8,204	7,453	5,773	5,142
2	214	181	173	147	139
3	25	23	20	18	15
4	5	6	5	5	5
5	0	0	0	0	0
9	3	0	15	0	16
Blank	3	1	0	0	0

Status	Number of ICPs (May 2021)	Number of ICPs (Nov 2020)	Number of ICPs (March 2020)	Number of ICPs (2019)	Number of ICPs (2018)
Active (2,0)	9,284	8,415	7,555	5,895	5,238
Inactive – new connection in progress (1,12)	17	27	17	19	31
Inactive – electrically disconnected vacant property (1,4)	26	15	20	31	25
Inactive – electrically disconnected remotely by AMI meter (1,7)	52	22	38	12	17
Inactive – electrically disconnected at pole fuse (1,8)	2	1	2	1	1
Inactive – electrically disconnected due to meter disconnected (1,9)	2	6	5	3	3

Inactive – electrically disconnected at meter box fuse (1,10)	2	0	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	0	0	1	2
Inactive – electrically disconnected ready for decommissioning (1,6)	3	3	3	5	6
Inactive – reconciled elsewhere (1,5)	0	0	0	0	0
Decommissioned (3)	80	65	43	29	18

1.8. Authorisation Received

An authorisation letter was not required.

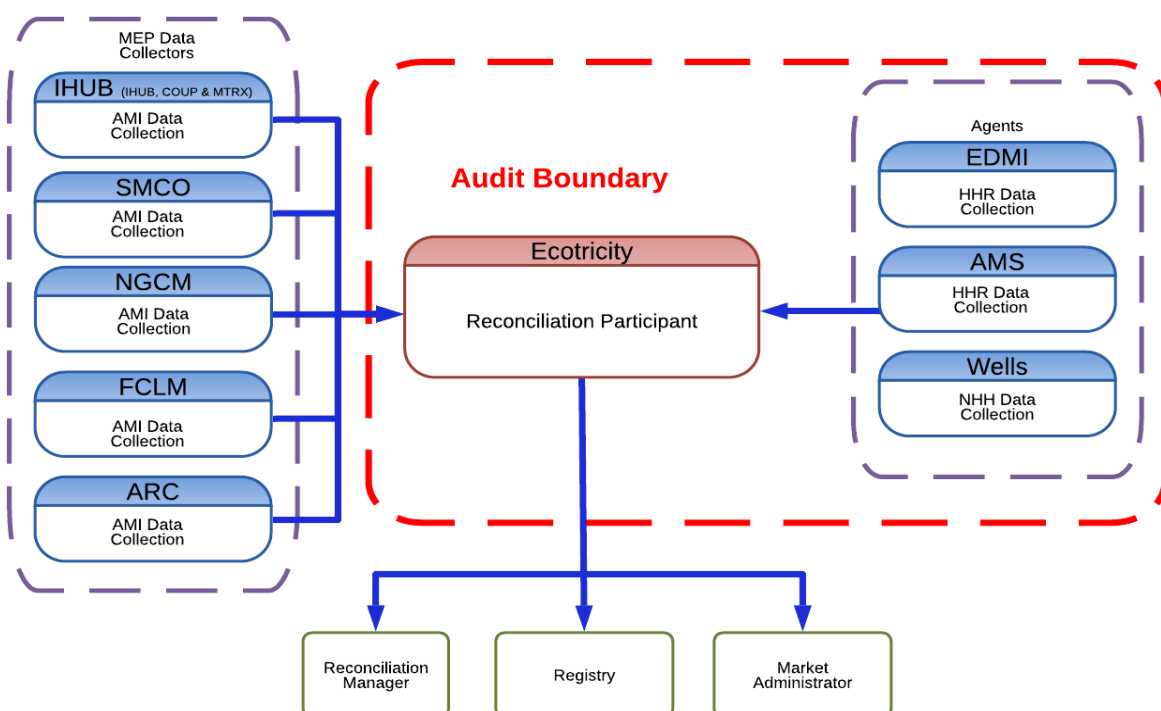
1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Ecotricity, 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 Ecotricity's premises in Auckland on 29 and 30 June 2021.

A registry list, event detail report, and audit compliance report for 1 December 2020 to 31 May 2021, and a registry list and meter installation details report for 31 May 2021 were reviewed.

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



The table below shows the tasks under clause 15.38 of part 15 for which Ecotricity requires certification. AMS, ARC, IHUB, MTRX, SMCO and FCLM provide AMI data as MEPs, not as agents. Wells provides NHH data as an agent.

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

1.10. Summary of previous audit

Ecotricity provided a copy of their previous audit completed in January 2021 by Steve Woods. The summary table below shows the status of the non-compliances raised in the previous audit. Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non-compliance	Status
Relevant information	2.1	11.2	Some registry discrepancies exist. Several scenarios leading to incorrect submission information. Inaccurate HHR data where ARC is the MEP due to having only one decimal place. Data from Metrix does not contain the first two intervals after daylight saving changes.	Still existing
Electrical Connection of Point of Connection	2.11	10.33A	ICP 0000166321TR5D9 not certified within five business days of reconnection.	Still existing
MEP arrangements.	2.13	10.36	MEP arrangements are not in place with WEL Networks or Nova.	Still existing
Changes to registry information	3.3	10 of Schedule 11.1	Some late status and trader updates.	Still existing
Provision of information to the registry manager	3.5	9 Schedule 11.1	19 new connections not updated to the registry within 5 business days.	Still existing
ANZSIC codes	3.6	9 (1)(k) of Schedule 11.1	11 incorrect ANZSIC codes.	Still existing
Management of “active” status	3.8	17 Schedule 11.1	Incorrect status for ICP 1001152652CKABE.	Cleared
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	Incorrect use of the AA switch response code.	Cleared
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	26 late CS files. Incorrect switch reading for one ICP.	Still existing
Retailers must use the same readings	4.4	6(1) of Schedule 11.3	Four late RR files. One incorrect reading used for ICP 0005469465RND56.	Still existing

Subject	Section	Clause	Non-compliance	Status
Gaining trader informs registry of switch request - switch move	4.7	9 Schedule 11.3	One late NT file.	Cleared
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	Incorrect use of the AA switch response code.	Still existing
Losing trader determines a different date - switch move	4.9	10(2) Schedule 11.3	Two AN files had event dates earlier than proposed.	Still existing
Losing trader must provide final information - switch move	4.10	11 Schedule 11.3	147 late CS files.	Still existing
Gaining trader changes to switch meter reading – switch move	4.11	12 of Schedule 11.3	One late RR file.	Still existing
Gaining trader to advise the registry manager - gaining trader switch	4.14	16 Schedule 11.3	One late CS file.	Cleared
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	11 late NW files.	Still existing
Electricity conveyed & notification by embedded generators	6.1	10.13, Clause 10.24 and 15.13	Submission had not occurred for 42 ICPs with embedded generation and the RM was not notified of gifting. One ICP bridged during the audit period.	Still existing
NHH meters 90% read rate	6.10	9(1) and (2) Schedule 15.2	Four ICPs not read in the 4-month period.	Still existing

Subject	Section	Clause	Non-compliance	Status
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHR aggregates file does not contain electricity supplied information. Under submission for 143 ICPs of 90,815 kWh. Over submission for 14 ICPs of 3,939 kWh. Under submission for inactive ICP with consumption of 3,883 kWh.	Still existing
Creation of submission information	12.2	15.4	Under submission for 143 ICPs of 90,815 kWh. Over submission for 14 ICPs of 3,939 kWh. Under submission for inactive ICP with consumption of 3,883 kWh. Incorrect HHR file for August 2020. No generation kWh submitted for 42 ICPs in April 2020. NHH generation kWh not submitted at the earliest opportunity.	Still existing
Permanence of meter readings for reconciliation	12.8	4 Schedule 15.2	Estimates not all replaced by the 14-month revision	Still existing
Historical estimate process	12.11	15.3	Incorrect HE calculation for one HE scenario from September to December 2020.	Cleared
Historical estimate reporting to RM	13.3	10 Schedule 15.3	58 NSPs did not meet the 80% threshold for March 2020. 14 NSPs did not meet the 100% threshold for February 2019.	Still existing

Subject	Section	Clause	Recommendation	Status
Complete and accurate information.	2.1	11.2	Run a check against the PR-010 report with history monthly. Check the AC-020 monthly.	Still existing
Changes to registry information	3.3	10 of Schedule 11.1	Implement the following validation reports: <ul style="list-style-type: none"> inactive status with consumption to identify ICPs that should have an active status, and active status with zero consumption to identify ICPs that should have an inactive status. 	Still existing

Subject	Section	Clause	Recommendation	Status
ANZSIC codes	3.6	9 (1)(k) of Schedule 11.1	Check the audit compliance report is reviewed regularly to identify incorrect ANZSIC codes. Improve validation at the time of customer registration.	Still existing
Losing trader must provide final information - standard switch	4.3	5 Schedule 11.3	Run a report of all manually created CS files against reads in robotron*esales to identify any differences and to identify whether RR files need to be sent or whether submission needs to be revised.	Not adopted
			Confirm why the "expected daily consumption" field is sometimes blank.	Cleared
Proportion of HHR estimates	12.8	4 of Schedule 15.2	Develop reporting to record HHR estimates per month per MEP to assist with improving service levels.	Still existing
Historical estimate process	12.11	4 and 5 Schedule 15.3	Manually re-check all HE scenarios to ensure they are correct. Review and strengthen change management controls to ensure appropriate testing is conducted when changes are made to any calculations in the database.	Cleared

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 processes to find and correct incorrect information was examined. The registry validation processes were examined in detail in relation to the achievement of this requirement.

The registry list and AC020 reports were examined to identify any registry discrepancies, and to confirm that all information was correct and not misleading.

Audit commentary

This clause requires that Ecotricity must check the list file against their own records and correct records as soon as practicable. Ecotricity now conducts a monthly check of their records against a list file with history.

The registry discrepancies identified are shown in the table below.

Qty 2021	Qty 2020	Scenario	Comment
435	502	HHA profile used where metering is HHR certified	The profile rules allow this, but it is recommended the HHR profile is populated.
1	1	HHR submission flag = "Y" for RPS profile	The registry is now updated for ICP 1002139822LC1F2
1	1	NHH submission flag = "Y" for HHR profile	0005708133RNE98 was a timing difference, and the submission type was corrected prior to the audit.
0	2	PV1 profile alone	
0	1	Incorrect status	

As recorded in **section 12.2**, there were several submission related issues, as follows.

- errors in aggs file between March and December 2020,
- under submission of 18,107.6 kWh due to ICPs missing from aggs file,
- 1,600 kWh not included in R-14 for an inactive ICP with consumption,

- submission of 576 kWh yet to occur for two inactive NHH ICPs with consumption,
- NHH generation kWh not submitted at the earliest opportunity,
- some incorrect and late files as shown in the breach report, and
- correction has not occurred for ICP 0000572387NRFFB for the bridged period.

There is an issue with ARC Innovations meters when used for HHR settlement. The on-site setup is that a meter pulses into a data storage device, which counts the pulses and “stores” them every 200 pulses which equals 0.1 kWh. There is only one decimal place, so the smallest increment of consumption is 0.1. Ecotricity supplies 313 HHR settled ICPs with ARCS as the MEP; all have meter category 1 and the multiplier flag set to N. Unfortunately for Ecotricity, the HHR data derived from ARC meters is not considered to be accurate in accordance with Clause 15.2. The total kWh per month will be accurate but if volumes are not recorded and reported against the correct trading period, Ecotricity may not be charged at the wholesale rate that applied during the trading period when the electricity was consumed. The affected meters do not have multipliers and have the highest metering category of 1, so the impact is expected to be minimal.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 10.6, 11.2, 15.2 From: 01-Dec-20 To: 09-Jul-21	Some registry discrepancies exist. Several scenarios leading to incorrect submission information. Inaccurate HHR data where ARC is the MEP due to having only one decimal place. Potential impact: High Actual impact: Medium Audit history: Multiple times Controls: Moderate Breach risk rating: 4		
Audit risk rating	Rationale for audit risk rating		
Medium	Controls are rated as moderate at the time of the audit, because the validation reporting has been improved and submission issues are being identified and resolved in a more timely manner. The impact is assessed to be medium because the kWh differences have been reduced.		
Actions taken to resolve the issue		Completion date	Remedial action status
Improved validation reporting to identify and resolve issues as they occur.		End of May 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Continuously working to improve our validation reporting and processes to identify and resolve these issues.		Ongoing	

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

AMI data is provided by MEPs via SFTP.

To confirm the process, I traced a sample of reads and volumes for three ICPs from the source files to robotron*esales.

Audit commentary

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

I traced a sample of data for three ICPs from the source files to robotron*esales 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 robotron*esales 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 Ecotricity's current customer terms and conditions.

Audit commentary

Ecotricity'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 Ecotricity's current customer terms and conditions and discussed compliance with these clauses.

Audit commentary

Ecotricity's terms and conditions include consent to access for authorised parties for the duration of the contract. Ecotricity 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.

Audit commentary

There were no ICPs where loss compensation occurs.

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 Ecotricity's current customer terms and conditions.

Audit commentary

Ecotricity'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 was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

Ecotricity completed 52 new connections during the audit period. In all cases, Ecotricity accepted responsibility by agreeing to be the retailer and claiming the ICP on the registry at "inactive - new connection in progress" status and they had an arrangement with the MEP.

Review of the AC020 report confirmed that:

- all active metered ICPs had an MEP recorded, and
- three active ICPs had meter category 9 and the unmetered flag set to no - ICPs 1002048681LCC53 and 0000502827CECF3 now have meter asset data on the registry, and ICP 0000670028WPEB had metering in the registry showing as removed; the metering details are now updated.

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.

Audit commentary

Ecotricity claimed all 52 new ICPs at “inactive - new connection in progress” status which helps to ensure that the trader is recorded on the registry if an ICP is temporarily electrically connected.

Ecotricity did not conduct or authorise any temporary electrical connections.

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:

- *for a point of connection to the grid – the grid owner has approved the connection,*
- *for an NSP that is not a point of connection to the grid - the relevant distributor has approved the connection.*
- *for a point of connection that is an ICP, but is not as NSP:*
 - o *the trader is recorded in the registry as the trader responsible for the ICP or has an arrangement with the customer and initiates a switch within two business days of electrical connection,*
 - o *if the ICP has metered load, 1 or more certified metering installations are in place,*
 - o *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the electrical connection.*

Audit observation

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

The AC020 report was examined to confirm process compliance and that controls are functioning as expected.

Audit commentary

New connections

Ecotricity completed 52 new connections during the audit period, which were all certified within five business days of initial electrical connection.

Reconnections

Ecotricity completed 59 reconnections during the audit period. ICP 0000190215TRA73 had expired interim certification at the time of reconnection and has not been recertified. Ecotricity has yet to establish a process to deal with these examples.

Bridged meters

Two ICPs were bridged during the audit period, both were re-certified on un-bridging.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.11 With: Clause 10.33A From: 25-Feb-21 To: 25-Feb-21	ICP 0000190215TRA73 was not certified within five business days of reconnection. Potential impact: Low Actual impact: Low Audit history: Once Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as weak because there isn't a process in place to request certification to occur. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
A report has been created to monitor expired meter certifications.		End of Feb 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Metering Team is setting up a process to monitor this report more frequently and request recertification of expired meters.		End of Oct 2021	

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.

A registry list for the audit period was reviewed to identify all networks Ecotricity has traded on during the audit period.

Audit commentary

Ecotricity has arrangements in place for line function services where they trade. These are stored electronically in a folder within the directory for each Network.

Ecotricity did not begin trading on any new networks during the audit period.

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.

A registry list for the audit period was reviewed to identify the MEPs for Ecotricity ICPs during the audit period.

Audit commentary

Ecotricity did not begin trading at any ICPs with new MEPs during the audit period.

The previous audit found that MEP arrangements were not in place with WEL Networks or Nova. Nova is now owned by Intellihub NZ Limited and there is an arrangement with Intellihub. The WEL Network documentation was not located, and although there is a “supply and payment” arrangement in place, the Code requires the arrangement to include the following details:

- for the reconciliation participant to provide the metering equipment provider with physical access to the metering installation for the point of connection and the premises at which it is situated; and
- arranging for the electrical disconnection of the point of connection, if required by the metering equipment provider to enable the metering equipment provider to comply with its obligations under this Part; and
- for the metering equipment provider to provide the reconciliation participant with access at the services access interface to the metering data from the metering installation for the point of connection.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.13 With: Clause 10.36 From: 01-Dec-20 To: 31-May-21	MEP arrangement is not in place with WEL Networks. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
MEP arrangements will be made as soon as possible.		End of Aug 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
MEP arrangements will be made as soon as possible.		End of Aug 2021	

2.14. Connecting ICPs then withdrawing switch (Clause 10.33A(5))

Code reference

Clause 10.33B

Code related audit information

If a trader connects an ICP it is in the process of switching and the switch does not proceed or is withdrawn the trader must:

- *restore the disconnection, including removing any bypass and disconnecting using the same method the losing trader used,*
- *reimburse the losing trader for any direct costs incurred.*

Audit observation

The process for reconnecting ICPs in the process of switching in was examined.

The event detail report was reviewed to identify reconnections for switch ins where the switch was withdrawn. The ICPs were checked to determine compliance.

Audit commentary

If an ICP was reconnected as part of the switching process and the switch was later withdrawn, Ecotricity would restore the disconnection and reimburse the losing trader for any direct costs incurred if requested.

Three ICPs which were reconnected had withdrawals completed. In all cases, reconnection occurred during Ecotricity's period of supply, and the disconnection was not required to be restored.

Audit outcome

Compliant

2.15. Electrical disconnection of ICPs (Clause 10.33B)

Code reference

Clause 10.33B

Code related audit information

Unless the trader is recorded in the registry or is meeting its obligation under 10.33A(5) it must not disconnect or electrically disconnect the ICP or authorise the metering equipment provider to disconnect or electrically disconnect the ICP.

Audit observation

The disconnection process was examined.

Traders are only able to update ICP status for event dates where they are responsible for the ICP on the registry. The event detail report was reviewed to identify all ICPs which were disconnected during the audit period where an NT was received from another trader during the audit period. The ICPs were checked to determine compliance.

Audit commentary

There are likely to be examples where reconnection occurs prior to Ecotricity becoming the trader. Ecotricity is aware of the requirements of this clause and will arrange for disconnection if it is required.

Ecotricity received NTs for four ICPs which it disconnected during the audit period. In all cases the disconnection was completed prior to the NT receipt date and the NT event date.

Audit outcome

Compliant

2.16. Removal or breakage of seals (Clause 48(1C), 48 (1D), 48 (1E), 48 (1F) of Schedule 10.7)

Code reference

Clause 48(1C), 48 (1D), 48 (1E), 48 (1F) of Schedule 10.7

Code related audit information

A trader can remove or break a seal without authorisation from the MEP to:

- *reset a load control switch, bridge or un-bridge a load control switch – if the load control switch does not control a to me block meter channel,*
- *electrically connect load or generation, if the load or generation has been disconnected at the meter,*
- *electrically disconnect load or generation, if the trader has exhausted all other appropriate methods of electrical disconnection,*
- *bridge the meter.*

A trader that removes or breaks a seal in this way must:

- *ensure personal are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code,*

- *replace the seal with its own seal,*
- *have a process for tracing the new seal to the personnel,*
- *update the registry (if the profile code has changed),*
- *notify the metering equipment provider.*

Audit observation

Policies and processes for removal and breakage of seals were reviewed.

A sample of disconnections, reconnections, additions of export metering, and bridged meters were checked for compliance.

Audit commentary

All activities which could result in seals being removed or broken are completed by Wells, the MEP, or subcontractors to the MEP.

Ecotricity has agreements in place with Wells and the MEPs, which include service levels. Wells and the MEPs are required to ensure that only qualified personnel perform work and manage and trace seals. Wells and the MEPs do not usually provide details of seals in their job completion paperwork.

Ecotricity receives work completion paperwork from Wells and the MEPs and uses this information to confirm the correct ICP attributes including status and profile, and update robotron*esales and the registry.

Most disconnections and reconnections are completed remotely, and any metering changes or addition of distributed generation are completed by the MEP. Wells completes any on-site disconnections and reconnections. Two meters were bridged during the audit period by approved personnel.

A sample of disconnections, reconnections, and additions of distributed generation were checked. I found that the MEP had completed the work where the seals were removed or broken.

Audit outcome

Compliant

2.17. Meter bridging (Clause 10.33C and 2A of Schedule 15.2)

Code reference

Clause 10.33C and 2A of Schedule 15.2

Code related audit information

A trader, or a distributor or MEP which has been authorised by the trader, may only electrically connect an ICP in a way that bypasses a meter that is in place ("bridging") if, despite best endeavours:

- *the MEP is unable to remotely electrically connect the ICP,*
- *the MEP cannot repair a fault with the meter due to safety concerns,*
- *the consumer will likely be without electricity for a period which would cause significant disadvantage to the consumer.*

If the trader bridges a meter, the trader must:

- *determine the quantity of electricity conveyed through the ICP for the period of time the meter was bridged,*
- *submit that estimated quantity of electricity to the reconciliation manager,*
- *within one business day of being advised that the meter is bridged, notify the MEP that they are required to reinstate the meter so that all electricity flows through a certified metering installation.*

The trader must determine meter readings as follows:

- by substituting data from an installed check meter or data storage device
- if a check meter or data storage device is not installed, by using half hour data from another period where the trader considers the pattern of consumption is materially similar to the period during which the meter was bridged,
- if half hour data is not available, a non-half hour estimated reading that the trader considers is the best estimate during the bridging period must be used.

Audit observation

The process for bridging meters was discussed and a sample of bridged meters were reviewed.

Audit commentary

Two ICPs were bridged during the audit period, both were re-certified on un-bridging.

The bridging occurred because remote reconnection was unable to be performed by the MEP. The MEP was notified within one business day.

For ICP 0015867512ELA0B, the period of bridging was estimated, and this estimate flowed through to the relevant submission file. ICP 0000572387NRFFB was bridged between 13 January 2021 and 20 January 2021 but the quantity of electricity has not been determined and submission has not occurred.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.17 With: Clause 10.33C and 2A of Schedule 15.2 From: 13-Jan-21 To: 20-Jan-21	Correction has not occurred for ICP 0000572387NRFFB for the bridged period. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as weak because they don't ensure corrections are made as soon as practicable. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We will work towards developing a process to check for bridged meters and enter reads for the bridged period.		End of Dec 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We will work towards developing a process to check for bridged meters and enter reads for the bridged period.		End of Dec 2021	

2.18. Use of ICP identifiers on invoices (Clause 11.30)

Code reference

Clause 11.30

Code related audit information

Each trader must ensure the relevant ICP identifier is printed on every invoice or document relating to the sale of electricity.

Audit observation

A sample invoice was reviewed to confirm that the ICP number is present.

Audit commentary

The ICP number is present on invoice documents relating to the sale of electricity.

Audit outcome

Compliant

2.19. Provision of information on dispute resolution scheme (Clause 11.30A)

Code reference

Clause 11.30A

Code related audit information

A retailer must provide clear and prominent information about Utilities Disputes:

- *on their website*
- *when responding to queries from consumers*
- *in directed outbound communications to consumers about electricity services and bills.*

If there are a series of related communications between the retailer and consumer, the retailer needs to provide this information in at least one communication in that series.

Audit observation

The process to ensure that information on Utilities Disputes is provided to customers was discussed. A sample of invoices, letter templates, emails, messenger correspondence, and recorded greetings for inbound calls were reviewed to determine whether clear and prominent information on Utilities Disputes is provided.

Audit commentary

Clear and prominent information on Utilities Disputes is provided:

- on invoices (refers to electricity and gas complaints commissioner but contact number is correct).
- in Ecotricity's terms and conditions.

The information is not present on the website or in directed outbound communications.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.19 With: Clause 11.30A From: 01-Apr-21 To: 06-Jul-21	Utilities Disputes information is not present on the website or in outbound communications. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as weak because the requirements were published in October 2020 and the required actions are not all complete. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ecotricity has recently designed a new website that is about to go live. Utilities Dispute information will be included in this. A new email footer is currently being created to include this information in all outgoing communication to customers and will be live within the next week. The invoice template will be updated with the correct information.		16/08/2021	Identified
		06/08/2021	
		31/08/2021	
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity has recently designed a new website that is about to go live. Utilities Dispute information will be included in this. A new email footer is currently being created to include this information in all outgoing communication to customers and will be live within the next week. The invoice template will be updated with the correct information.		16/08/2021	
		06/08/2021	
		31/08/2021	

2.20. Provision of information on electricity plan comparison site (Clause 11.30B)

Code reference

Clause 11.30B

Code related audit information

A retailer that trades at an ICP recorded on the registry must provide clear and prominent information about Powerswitch:

- on their website

- in outbound communications to residential consumers about price and service changes
- to residential consumers on an annual basis
- in directed outbound communications about the consumer's bill.

If there are a series of related communications between the retailer and consumer, the retailer needs to provide this information in at least one communication in that series.

Audit observation

The process to ensure that information on Consumer Powerswitch is provided to customers was discussed. A sample of invoices, letter templates and emails were reviewed to determine whether clear and prominent information on Powerswitch is provided.

Audit commentary

Clear and prominent information on Powerswitch is not present as required by this clause.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.20 With: Clause 11.30B From: 01-Apr-21 To: 06-Jul-21	Powerswitch information is not present in communications. Potential impact: Low Actual impact: Low Audit history: None Controls: None Breach risk rating: 5		
Audit risk rating	Rationale for audit risk rating		
Low	There are no processes in place to communicate with customers regarding Powerswitch. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ecotricity has recently designed a new website that is about to go live. Powerswitch information will be included in this.		16/08/2021	Identified
A new email footer is currently being created to include this information in all outgoing communication to customers and will be live within the next week.		06/08/2021	
The invoice template will be updated to include this information.		31/08/2021	
Preventative actions taken to ensure no further issues will occur		Completion date	

Ecotricity has recently designed a new website that is about to go live. Powerswitch information will be included in this.	16/08/2021	
A new email footer is currently being created to include this information in all outgoing communication to customers and will be live within the next week.	06/08/2021	
The invoice template will be updated to include this information.	31/08/2021	

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 event detail report for the audit period was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

Ecotricity completed 52 new connections during the audit period and achieved compliance with the clauses above.

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 processes were examined in detail to evaluate the strength of controls, and the registry list and audit compliance reports were examined to confirm process compliance. Late updates to active for new connections are discussed in **section 3.5**.

Audit commentary

The new connection processes are detailed in **section 2.9** above. The process in place ensures that the trader required information is populated as required by this clause.

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 processes to manage status changes are discussed in detail in **sections 3.8** and **3.9** below. The processes to manage MEP nominations and trader updates were discussed.

The registry list and audit compliance reports were examined and a sample of late status updates, trader updates and MEP nominations were checked as described in the audit commentary.

Audit commentary

Status and trader event updates are made directly into the registry and the registry then updates robotron*esales once the metering details are also loaded to the registry by the MEP.

The audit compliance report was examined to confirm whether the registry is notified within five business days when information referred to in clause 10 of schedule 11.1 changes.

Status updates

Event	Year	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Active status updates for reconnections	2019	70		50.7%
	2020 (Apr)	73	15	58.3%
	2020 (Nov)	50	98.77	21.88%
	2021	21	20.08	65.57%
Inactive status updates for disconnections	2020 (Nov)	11	4.82	91.6%
	2021	3	0.73	98.43%

12 of the late updates to active status were made more than 30 business days after the event date, and the latest update was 284 business days after the event date. I checked the 12 late updates made more than 30 business days after the event date and found the following issues:

- two updates were late due to late notification from the field by Wells,
- two late updates were due to corrections, and
- there were eight examples of internal processing issues where the registry status was not correctly updated.

All of the late updates to inactive status were made within 30 business days of the event date. I checked all three late updates, and they were due to processing errors.

During the previous audit I stated that improved validation was required to ensure statuses were correct. I recommended the following checks were conducted as a minimum:

- inactive status with consumption to identify ICPs that should have an active status, and
- active status with zero consumption to identify ICPs that should have an inactive status.

Reporting is in place for consumption on inactive ICPs. Reporting is not yet in place for zero consumption. This is recorded in **section 9.5** as a recommendation.

Trader updates

Event	Year	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Trader updates	2020 (Nov)	314	20.12	60.4%
	2021	149	7.26	75.25%

Late trader updates include MEP nominations and profile changes. 19 of the late trader updates were made more than 30 business days after the event date, and the latest update was 311 business days after the event date.

I checked the ten latest updates and ten between 15 and 75 business days after the event date and found they were caused by:

- ten were profile corrections, many were identified during the previous audit,
- four were due to late identification of MEP changes,
- four were profile changes at the end of the month between HHR and NHH depending on the quantity of data available,
- one was inadvertent re-population of the same information, and
- one was a BTS to permanent notified late.

ANZSIC code population

The audit compliance report did not identify any ANZSIC codes updated more than 20 business days after trading commencing.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 02-Dec-20 To: 12-May-21	21 late updates to active status. Three late updates to inactive status. 149 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	The controls are recorded as moderate. There is now a process to validate esales against a list file with history and some other validation reports are being used. The impact on settlement and participants is low; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Validation reporting is in place to help identify and update ICPs.		End of May 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Further investigation will be undertaken to evaluate additional processes to avoid late trader updates including a report to monitor ICPs with zero consumption.		Ongoing	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

Audit observation

The new connection, MEP nomination and decommissioning processes were reviewed, and the registry list and audit compliance reports were examined to confirm process compliance.

A sample of MEP nomination rejections and decommissioned ICPs were examined.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

Ecotricity nominates the MEP based on notification of meter changes by relevant MEPs. Backdated MEP nominations are recorded as non-compliance in **section 3.3**.

Review of the AC020 report confirmed that:

- all active metered ICPs had an MEP recorded, and
- three active ICPs had meter category 9 and the unmetered flag set to no; all three had details populated at the time the audit report was produced.

All 460 MEP nominations identified on the event detail report were accepted.

ICP Decommissioning

Ecotricity continue with their obligations under this clause. ICPs that are vacant and active, or inactive are maintained in robotron*esales. Ecotricity's process meets the obligation to arrange a meter interrogation prior to or upon meter removal and notify the MEP.

Ten ICPs were decommissioned with reason code "installation dismantled" during the audit period. Final meter readings were obtained for eight ICPs but two ICPs were decommissioned without Ecotricity's knowledge and estimates were made for these. The MEP was advised in all cases where they had not already been advised.

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 processes were examined in detail to evaluate the strength of controls, and the registry list and audit compliance reports were examined to confirm process compliance.

Audit commentary

New connection timeliness

The audit compliance 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.

Event	Year	ICPs Notified Greater Than 5 Days	Average Notification Days	Percentage Compliant
Active status updates for new connections	2020 (Nov)	19		70.37%
	2021	11	4.51	81.97%

I checked all 11 late updates, and they were all due to late notification from the field.

All 11 late status updates had MEP nominations made on time, because the MEP was nominated when the ICP was claimed at “inactive - new connection in progress” status prior to initial electrical connection. The AC020 report recorded that all MEP nominations were accepted within 14 business days.

New connection information accuracy

The AC020 report confirmed that all ICPs with an initial electrical connection date populated has been moved to “active” status.

Active dates for new connections were compared to the distributor’s initial electrical connection date, and MEP’s certification date using the AC020 report. 23 ICPs with date discrepancies were identified:

Exception type	Quantity	Commentary
IECD = active date and MCD ≠ active date	2	ICPs 0009907015LN375 and 1000590642PCEFE both have correct active dates.
IECD ≠ active date and MCD = active date	2	ICPs 0001710633TGAD4 and 1099578278CNC61 both have correct active dates.
No IECD and MCD = active date	19	Five exceptions were timing differences, and the initial electrical connection date was updated to match the active status date after the AC020 report was run. The other 14 all have correct active dates.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: 03-Dec-20 To: 18-Apr-21	11 late status updates to active for new connections. 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 recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ecotricity will review processes to identify improvements that can be made to reduce the number of late status updates for new connections.		End of Mar 2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity will review processes to identify improvements that can be made to reduce the number of late status updates for new connections.		End of Mar 2022	

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 and AC020 reports were reviewed and ANZSIC codes were checked for a sample of ICPs to determine compliance.

Audit commentary

ANZSIC codes are set based on information provided on the customer application.

During the last audit, I recommended the audit compliance report be checked regularly to identify incorrect ANZSIC codes and I recommended more robust validation at the time of customer registration. I have repeated these recommendations because it appears validation still needs to be strengthened.

Recommendation	Description	Audited party comment	Remedial action
Regarding Clause 9 (1)(k) of Schedule 11.1	Ensure the audit compliance report is reviewed regularly to identify incorrect ANZSIC codes. Improve validation at the time of customer registration.	Ecotricity will implement better processes to identify and correct ANZSIC codes on a regular basis. In addition, ANZSIC codes for commercial/corporate customers will be checked upon registration to ensure no changes need to be made.	Identified

Review of the AC020 report found:

- no ICPs with blank or T9 series ANZSIC codes,
- one active ICP with a residential ANZSIC code and meter category three; this ANZSIC code is correct, and
- three active ICPs with a residential ANZSIC code and meter category two; two of these are not residential.

I checked a sample of 50 ICPs with the ten most frequently applied codes to confirm they were correct. I compared the codes applied to google street view and registry property name information; and checked customer industry information for any ICPs I could not verify using registry and google street view information. Eight of the 50 were incorrect.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.6 With: Clause 9 (1)(k) of Schedule 11.1 From: 01-Dec-20 To: 06-Jul-21	At least 10 incorrect ANZSIC codes. 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 recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Processes to check the audit compliance report and check customer's ANZSIC code upon registration will be implemented.		End of Oct 2021	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
Processes to check the audit compliance report and check customer's ANZSIC code upon registration will be implemented.	End of Oct 2021	

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 processes to manage unmetered load were examined. The registry list and AC020 reports were reviewed to determine compliance.

Audit commentary

Ecotricity currently supplies 16 ICPs with unmetered load. All of the ICPs have the unmetered flag set to yes and a non-zero daily unmetered kWh.

The audit compliance report found:

- no ICPs where the unmetered load flag is yes, but the daily unmetered kWh is zero,
- no ICPs where the distributor has unmetered load recorded and Ecotricity does not, and
- no ICPs where the trader's daily unmetered kWh is different by more than ± 0.1 kWh from a calculation based on the distributor's unmetered load details.

Ecotricity does not currently supply any active unmetered builder's temporary supply 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

The new connection processes were examined in detail as discussed in **sections 2.9** and **3.5**.

The reconnection process was examined using the AC020 and event detail reports.

- The timeliness and accuracy of data for new connections is assessed in **section 3.5**.
- The timeliness of data for reconnections is assessed in **section 3.3**, and a sample of 20 updates were checked for accuracy.

For new connections which had been electrically connected during the audit period, the initial electrical connection date, earliest active date, and meter certification date were compared to determine the accuracy of the connection dates using the AC020 report.

Audit commentary

Status events are entered directly into the registry. Robotron*esales is updated from the registry every two days.

New connection information accuracy

The AC020 report confirmed that all ICPs with an initial electrical connection date populated has been moved to active status.

Active dates for new connections were compared to the distributor's initial electrical connection date, and MEP's certification date using the AC020 report. 23 ICPs with date discrepancies were identified:

Exception type	Quantity	Commentary
IECD = active date and MCD ≠ active date	2	ICPs 0009907015LN375 and 1000590642PCEFE both have correct active dates.
IECD ≠ active date and MCD = active date	2	ICPs 0001710633TGAD4 and 1099578278CNC61 both have correct active dates.
No IECD and MCD = active date	19	Five exceptions were timing differences, and the initial electrical connection date was updated to match the active status date after the AC020 report was run. The other 14 all have correct active dates.

Reconnection information accuracy

A sample of 12 reconnections were checked. All of them had the correct event date.

The previous audit recorded non-compliance because ICP 1001152652CKABE was inactive from the switch in date of 6 November 2019, but there was consumption of 3,883 kWh during this period. The status has been corrected, but the revision for volume was only conducted out of robotron*esales from May 2020; volume was not created from Agility for the earlier period. This is recorded as non-compliance in **section 12.7**.

Audit outcome

Compliant

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The disconnection process was examined using the AC020 and event detail reports. The timeliness of data for disconnections is assessed in **section 3.3**, and a sample of updates were checked for accuracy.

The registry list file was examined to identify any ICPs that had been at the “inactive - new connection in progress” for more than 24 months.

Audit commentary

Ecotricity conducts disconnections remotely where AMI is present and manually where AMI is not present. The registry is updated once confirmation of the disconnection is provided by the MEP. Status events are entered directly into the registry. Robotron*esales is updated from the registry every two days.

Inactive new connection in progress status

There are currently 17 ICPs at “inactive - new connection in progress” status, and none have metering details or initial electrical connection dates recorded. ICP 0000509077CEB16 had been at “inactive - new connection in progress” status for more than two years. It was decommissioned before the audit report was completed.

Other inactive statuses

The AC020 report did not identify any ICPs with AMI-remote disconnection, where AMI metering was not indicated.

I checked a sample of three (or all) status updates for each inactive status reason code. All status reason codes were correct.

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

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Audit observation

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.

Audit commentary

Ecotricity has not had any queries in relation to "new" or "ready" ICPs.

Two ICPs are at "new" status and three ICPs are at "ready" status. None of the ICPs have been at "new" or "ready" for more than 24 months.

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 Ecotricity deem all conditions to be met. A typical sample of NTs were checked for each trader code to confirm that these were notified to the registry within two business days, and that the correct switch type was selected.

Audit commentary

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

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

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

I checked the metering category for all 650 transfer switch ICPs and found none had metering categories of three or above.

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The event detail report was reviewed to:

- identify AN files issued by Ecotricity during the audit period,
- assess compliance with the requirement to meet the setting of event dates requirement, and
- assess whether ANs response codes had been correctly applied.

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

Audit commentary

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 21 transfer ANs had proposed event dates within five business days of the NT receipt date.

I checked response code accuracy for all 21 ANs. AD was correctly applied for all ANs because the AMI flag was set to yes.

AN timeliness

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

Audit outcome

Compliant

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

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

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

Audit observation

The event detail report was reviewed to identify CS files issued by Ecotricity during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of 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 these CS files were checked to determine whether the average daily consumption was correct.

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

Audit commentary

CS files are now created in robotron*esales and a file is sent to the registry.

CS timeliness

The switch breach history report recorded one CS breach where the CS arrival date was more than five business days after the CS transfer date. This was one day late and was due to a meter number mis-match preventing the automatic sending of the CS. The CS was sent manually when the issue was resolved.

CS content

The “expected daily consumption” field is used to populate CS files and was populated for all CS files issued during the audit period. No transfer CS files had average daily kWh which was negative, zero, or over 200 kWh.

Last actual read dates were consistent with the switch event read type applied for all transfer switches. All CS files had a last actual read date the day before the event date, and an actual switch event reading.

I checked the accuracy of the content of five transfer CS files and found one minor issue. ICP 0000064798CPC5C had average daily consumption of 6 kWh in the CS file, but the most recent read to read consumption was 7 kWh. Ecotricity is investigating this.

The previous audit found an incorrect switch read for ICP 0000816070WP92D. A read of 5392 was sent in the CS file, which was manually estimated because the meter reading search tool (ransack) did not find an actual reading. However, there was an actual reading of 5422, which was used for submission and billing. There was no impact because the switch was later withdrawn.

The previous audit recommended running a report of all manually created CS files against reads in robotron*esales to identify any differences and to identify whether RR files need to be sent or whether submission needs to be revised. This recommendation was not adopted.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.3 With: Clause 5 Schedule 11.3 From: 01-Apr-21 To: 19-May-21	One CS breach for a transfer switch. Incorrect average daily consumption for one ICP. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Significant improvements within switching have been implemented since the last audit to ensure switching is completed in the required timeframe.		End of May 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity will continue to monitor CS files to ensure they are accurate and sent on time.		Ongoing	

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 was analysed to identify all read change requests and acknowledgements during the audit period. A sample of files were checked to confirm that the content was correct, and that robotron*esales reflected the outcome of the RR process.

I also checked for CS files with estimated readings provided by other traders where no RR was issued, to determine whether the correct readings were recorded in robotron*esales.

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

Audit commentary

RR

Switch reads are checked by comparing actual AMI data to the switch read to determine whether an RR is required. Sometimes an AMI midnight read may not be available and so it is derived by deducting the sum of the trading periods for that day to determine the expected start read.

33 RRs were issued by Ecotricity for transfer switches; 26 were accepted and seven were rejected. I checked the content of all rejected files and three accepted files.

Compliance was achieved with these clauses in all cases. RR reads are correctly supported by two validated reads.

I found discrepancies with four ICPs, as recorded below.

- ICP 0446619132LCA49 had 216543 in the CS file labelled as an estimate. Ecotricity has a reading of 216543 derived from an actual reading for the next day with the 48 intervals subtracted for the switch date. Ecotricity sent an RR which was rejected. Ecotricity and the losing trader were both submitting HHR, therefore clauses 6(2) and (3) in section 4.5 do not apply, meaning Ecotricity technically must use the losing trader's reading even though it's incorrect. This raises two issues; firstly, if Ecotricity used the losing trader's reading they would not comply with clause 11.2, which requires that information is complete and accurate. The second issue is that the HHR data doesn't match the switch event reading provided by the losing trader.
- ICP 0006604242RN0A4 is the same scenario as above.
- ICP 0005716144RN62E is the same scenario as above.
- ICP 0007109003RNDD1 had the RR rejected, but Ecotricity correctly used their RR read because it was an actual from AMI and the losing trader was submitting as NHH.

The switch breach history report did not record any late RR files.

AC

No AC files were issued, and the switch breach history report did not record any late AC files. All CS readings provided by Ecotricity were actual.

Incoming CS files

Review of five transfer CS files with estimated reads where no RR was issued confirmed that Ecotricity correctly used the CS reads as start reads.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: Clause 6(1) and 6A Schedule 11.3 From: 01-Dec-20 To: 27-Apr-21	Incorrect (but accurate) readings used for three ICPs. Potential impact: Low Actual impact: None Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because they minimise risk to an acceptable level. The impact on settlement and participants is negligible; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
RR processes have been automated to improve the efficiency of sending RR files. Ecotricity uses best efforts to ensure the correct switch read is used and will continue to monitor these.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
RR processes have been automated to improve the efficiency of sending RR files. Ecotricity uses best efforts to ensure the correct switch read is used and will continue to monitor these.		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 process for the management of read requests was examined. The event detail report was analysed to identify read change requests issued and received under Clause 6(2) and (3) Schedule 11.3 and determine compliance.

Audit commentary

Ecotricity issued 16 RRs for transfer switches where they had recorded a HHR profile, and the RR was issued within five business days of switch completion. Three of these were validly rejected by the other trader because an actual CS even reading was provided, and the remainder were accepted.

Other retailers cannot usually issue read change requests to Ecotricity under clause 6(2) and (3) of schedule 11.3 because Ecotricity is predominantly a HHR only trader. No RR files were issued to Ecotricity by other traders during the audit period.

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 Ecotricity whether any disputes have needed to be resolved in accordance with this clause.

Audit commentary

Ecotricity 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 Ecotricity deem all conditions to be met.

All backdated 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.

Audit commentary

The switch gain process was examined to determine when Ecotricity deem all conditions to be met. A typical sample of NTs were checked for each trader code to confirm that these were notified to the registry within two business days, and that the correct switch type was selected.

Audit commentary

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

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

I checked the metering category for all 930 switch move ICPs and found none had metering categories of three or above.

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

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

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

Audit observation

The event detail report was reviewed to:

- identify AN files issued by Ecotricity during the audit period,
- assess compliance with the requirement to meet the setting of event dates requirement, and
- assess whether ANs response codes had been correctly applied.

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

Audit commentary

AN content

The event detail report was reviewed for all 12 switch move ANs to assess compliance with the setting of event dates requirements:

- all had proposed event dates within ten business days of the NT receipt date, and
- no ANs has a proposed event date before the gaining trader’s requested date.

The switch breach report recorded two ET breaches where the AN proposed event date was one day before the NT received date and NT proposed event date. The switches were completed effective from the AN proposed event date. In both cases the best course of actions would have been to send an NW. The ICPs are:

- 0203814738LCCE8, and
- 1002109802LCD8B.

I checked response code accuracy for all 12 ANs on the event detail report:

- ten had AD (Advanced metering) correctly applied, because the AMI flag was set to yes, and
- two had PD (Premises electrically disconnected) correctly applied because they were disconnected on the registry at the time of the switch.

AN timeliness

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

CS timeliness

The switch breach history report recorded:

- one CS breach, and
- five T2 breaches where the CS was delivered more than five business days after receipt of the NT and no AN was provided, or an AN was provided with a proposed event date consistent with the gaining trader’s date; one was due to an incorrect due date calculation in robotron*esales, one was due to considering Auckland Anniversary as a statutory holiday, and three were due to processing issues.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.8 With: Clause 10(1) Schedule 11.3 From: 01-Dec-20 To: 27-Apr-21	Five T2 breaches for switch moves. Two ET breaches for switch moves. One CS breach. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on other participants was minor because the files were only late by one or two days. The audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Significant improvements within switching have been implemented since the last audit to ensure switching is completed in the required timeframe.		End of May 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity will continue to monitor AN and CS files to ensure they are accurate and sent on time.		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

The event detail report and switch breach history report were reviewed to identify AN files issued by Ecotricity during the audit period and assess compliance with the requirement to meet the setting of event dates requirement.

Audit commentary

For 11 of the 12 switch move ANs listed on the event detail report, the proposed event date matched the gaining trader's proposed event date. For ICP 0000202566DEC0B, Ecotricity proposed an event date one day after the gaining trader's proposed date, and the switch was compliantly completed effective from this date.

The switch breach report recorded two ET breaches where the AN proposed event date was one day before the NT received date and NT proposed event date. The switches were completed effective from the AN proposed event date. The ICPs are:

- 0203814738LCCE8, and
- 1002109802LCD8B.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.9 With: Clause 10(2) Schedule 11.3 From: 23-Mar-21 To: 31-Mar-21	Two ET breaches for switch moves. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Significant improvements within switching have been implemented since the last audit to ensure switching is completed in the required timeframe.		End of May 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity will continue to monitor AN files to ensure they are accurate and sent on time.		Ongoing	

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 event detail report was reviewed to identify CS files issued by Ecotricity during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of 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 these CS files were checked to determine whether the average daily consumption was correct.

Audit commentary

The “expected daily consumption” field is used to populate CS files and was populated for all CS files issued during the audit period. No CS files had average daily kWh which was negative or over 200 kWh. One CS file had an average daily kWh of zero which was confirmed as correct.

Last actual read dates were consistent with the switch event read type applied for all transfer switches. All CS files had a last actual read date the day before the event date, and an actual switch event reading.

I checked the accuracy of the content of all four switch move CS files and found ICP 0000503053CE909 had average daily consumption of 1 kWh recorded but this should have been 2 kWh.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.10</p> <p>With: Clause 11 Schedule 11.3</p> <p>From: 02-Apr-21 To: 02-Apr-21</p>	<p>Incorrect daily kWh for one ICP.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are recorded as strong because they mitigate risk to an acceptable level.</p> <p>The impact on settlement and participants is minor; therefore, the audit risk rating is low.</p>

Non-compliance	Description	
Actions taken to resolve the issue		Completion date
Ecotricity is checking what caused this discrepancy to see if any changes need to be made to the calculation of average daily consumption in the CS file.		Ongoing
Preventative actions taken to ensure no further issues will occur		Completion date
Ecotricity is checking what caused this discrepancy to see if any changes need to be made to the calculation of average daily consumption in the CS file.		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 was analysed to identify all read change requests and acknowledgements during the audit period. A sample of files were checked to confirm that the content was correct, and that robotron*esales reflected the outcome of the RR process.

I also checked for CS files with estimated readings provided by other traders where no RR was issued, to determine whether the correct readings were recorded in robotron*esales.

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

Audit commentary

RR

Switch reads are checked by comparing actual AMI data to the switch read to determine whether an RR is required. Sometimes an AMI midnight read may not be available and so it's derived by deducting the sum of the trading periods for that day to determine the expected start read.

106 RRs were issued by Ecotricity for switch moves; 88 were accepted and 18 were rejected. I checked the content of five rejected files and five accepted files. The five accepted files were all created correctly. Of the rejected files, ICP 0007009952TU809 had a correctly derived read in the RR, but the losing trader was trading HHR and is entitled to reject the RR even though the read was correct. Ecotricity used the correct read, not the read in the CS file.

AC

No AC files were issued, and the switch breach history report did not record any late AC files. All CS readings provided by Ecotricity were actual.

Incoming CS files

Review of five transfer CS files with estimated reads where no RR was issued confirmed that Ecotricity used the correct start reads.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.11 With: Clause 12 Schedule 11.3 From: 05-Feb-21 To: 05-Feb-21	Incorrect (but accurate) readings used for one ICP. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because they minimise risk to an acceptable level. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status

RR processes have been automated to improve the efficiency of sending RR files. Ecotricity uses best efforts to ensure the correct switch read is used and will continue to monitor these.	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
RR processes have been automated to improve the efficiency of sending RR files. Ecotricity uses best efforts to ensure the correct switch read is used and will continue to monitor these.	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

The switch gain process was examined to determine when Ecotricity deem all conditions to be met. All HH NTs were checked.

Audit commentary

One HH NT was issued for a meter category 3 ICP. The NT was sent within the appropriate timeframe. I checked the metering category for all transfer switch and switch move ICPs and found none had metering categories of three or above.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The event detail report was reviewed to identify all HH ANs issued during the audit period, and the switch breach history report was reviewed.

Audit commentary

No HH switch outs occurred during the audit period, and no late HH ANs were recorded on the switch breach history report.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

The event detail report was reviewed to identify all HH CS files issued during the audit period, and the switch breach history report was reviewed.

Audit commentary

One HH CS file was issued during the audit period. The file was sent on time and the content was accurate. No late HH CS files were recorded on the switch breach history report.

Audit outcome

Compliant

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

Code reference

Clauses 17 and 18 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The event detail report was reviewed to:

- identify all switch withdrawal requests issued by Ecotricity, and check a sample for accuracy,
- identify all switch withdrawal acknowledgements issued by Ecotricity, and check a sample of rejections, and
- confirm timeliness of switch withdrawal requests.

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

Audit commentary

NW

Three (1.2%) of the 68 NW issued by Ecotricity were rejected by the other trader. I reviewed all rejections, and ten acceptances and confirmed that the correct withdrawal advisory codes were applied. The sample included two or all NWs issued for each advisory code.

The switch breach history report recorded:

- one NA breach where the NW arrived more than two calendar months after the CS event date; the ICP is 0000026905UN6AD and the customer had signed up for the incorrect property, and
- one NW breach where the NW arrived more than three business days after the NT was received; the ICP is 1002059307UNEC6 and the customer cancelled late.

AW

Ten (1.2%) of the 79 AWs issued by Ecotricity were rejections. I reviewed all rejections, and confirmed they were rejected based the information available at the time the response was issued.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.15 With: Clauses 17 and 18 Schedule 11.3 From: 25-May-21 To: 28-May-21	One NA breach. One NW breach. 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	The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Significant improvements within switching have been implemented since the last audit to ensure switching is completed in the required timeframe.		End of May 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

Ecotricity will continue to monitor NW and AW files to ensure they are accurate and sent on time.	Ongoing	
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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.

There were no examples of meter reading errors.

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

Audit outcome

Compliant

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

Code reference

Clause 11.15AA to 11.15AB

Code related audit information

A losing retailer (including any party acting on behalf of the retailer) must not initiate contact to save or win back any customer who is switching away or has switched away for 180 days from the date of the switch.

The losing retailer may contact the customer for certain administrative reasons and may make a counteroffer only if the customer initiated contact with the losing retailer and invited the losing retailer to make a counteroffer.

The losing retailer must not use the customer contact details to enable any other retailer (other than the gaining retailer) to contact the customer.

Audit observation

I checked processes for "win-back" activity, and I checked all "CX" coded switch withdrawal requests.

Audit commentary

Ecotricity does not conduct “win-back” activity.

I identified nine NW CX which were issued within 180 days of switch completion where Ecotricity was the losing trader. All the NWs were accepted by the gaining trader. I discovered that Ecotricity’s outbound email to all switching customers includes two questions; whether the customer intends to switch, and the reason for switching. The practice not regarding saves and win-backs (shown below) specifically states that traders cannot ask why customers are switching away.

5.10 A losing retailer, or its agent or third party, **MUST NOT** contact a customer during the switch protected period,¹³ where, as a result of the customer switch, the losing retailer wants to ascertain the reason that the customer switched away. To ensure compliance with the Code, the Authority recommends that market research to ascertain why a customer switched away should be conducted after the conclusion of the switch protected period. Within the switch protected period retailers need to ensure that they do not prompt or otherwise initiate a save or win-back

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.17 With: Clause 11.15AA to 11.15AB From: 01-Dec-20 To: 30-Jun-21	Correspondence to switching customers’ requests reasons for switching. Potential impact: Medium Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because customers are not contacted with offers to remain. The non-compliant practice is limited to requesting reasons for switching. The impact on participants is recorded as low, because the outbound correspondence can lead to customers changing their switching plans.		
Actions taken to resolve the issue		Completion date	Remedial action status
Email communication has been changed to remove the question asking why the customer has switched.		13/07/2021	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Email communication has been changed to remove the question asking why the customer has switched.		13/07/2021	

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 processes to manage unmetered load were examined. The registry list and AC020 reports were reviewed to determine compliance.

Audit commentary

Ecotricity supplies 11 ICPs with shared unmetered load indicated by the distributor. All of the ICPs have the unmetered flag set to yes and a non-zero daily unmetered kWh.

The audit compliance report found:

- no ICPs where the unmetered load flag is yes, but the daily unmetered kWh is zero,
- no ICPs where the distributor has unmetered load recorded and Ecotricity does not, and
- no ICPs where the trader's daily unmetered kWh is different by more than ± 0.1 kWh from a calculation based on the distributor's unmetered load details.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

The processes to manage unmetered load were examined. The registry list and AC020 reports were reviewed to determine compliance.

Audit commentary

Ecotricity does not currently supply any ICPs with unmetered load 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 processes to manage unmetered load were examined. The registry list and AC020 reports were reviewed to determine compliance.

Audit commentary

Ecotricity does not currently supply any ICPs with unmetered load 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 processes to manage unmetered load were examined. The registry list and AC020 reports were reviewed to determine compliance.

Audit commentary

Ecotricity does not currently supply any ICPs with distributed unmetered load.

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 metering, submission, and distributed generation were reviewed. The registry list and AC020 were examined to determine compliance.

Audit commentary

Metering installations installed

I checked all ICPs at “new connection in progress” status and they had an arrangement with the MEP.

Review of the AC020 report confirmed that:

- all active metered ICPs had an MEP recorded, and
- three active ICPs had meter category 9 and the unmetered flag set to no; ICPs 1002048681LCC53 and 0000502827CECF3 now have meter asset data on the registry and ICP 0000670028WPEB had metering in the registry showing as removed; the metering details are now updated.

No submission information is determined using subtraction.

Distributed Generation

Ecotricity has reporting to identify distributed generation discrepancies, however the report is not routinely monitored. I recommend this reporting is checked on a regular basis.

Recommendation	Description	Audited party comment	Remedial action
Regarding Clause 10.13, Clause 10.24 and 15.13	Conduct regular checks of reporting to identify DG discrepancies.	Ecotricity will update processes to monitor this report on a regular basis.	Identified

The registry list recorded 4,462 active ICPs with non-zero generation recorded by the distributor.

- 4,441 ICPs have I flow meter registers with the settlement indicator set to yes. 4,435 have HHR submission, or a NHH profile indicating generation. Six ICPs did not have a PV1 or EG1 profile. These are now correct, and I confirmed that if the meter has an I-flow register, submission automatically occurs against the correct profile.
- 27 ICPs do not have I-flow meter registers, or have I-flow meter registers but the settlement indicator is set to no. 13 of the 27 had correct metering installed by the date of the audit report. Submission only occurs from the date metering is installed or available, which was an average delay of 225 days. Nine were within 50 days. 14 still don't have appropriate metering and the average number of days from solar installation or from the ICP switching to Ecotricity and is 328.

I checked for consistency between the profiles applied and distributor fuel types. All ICPs with PV1 profile had solar indicated by the distributor. 16 ICPs with profile EG1 had solar indicated by the distributor, but EG1 is correct because batteries are installed.

I identified 35 ICPs with HHA or HHR profile, and installation type of B, and an I-flow register which did not have I-flow rows in the HHR aggregates submissions. All 35 had their I-flow registers installed after the HHR aggregates reconciliation periods. None were genuine exceptions.

Bridged meters

Two ICPs were bridged during the audit period. This is non-compliance because electricity conveyed is not quantified during the bridged period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.1 With: Clause 10.13, Clause 10.24 and 15.13 From: 01-Dec-21 To: 08-Jul-21	Submission had not occurred for 27 ICPs with embedded generation and the RM was not notified of gifting. Two ICPs bridged during the audit period. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as weak because they need to be strengthened to identify ICPs with generation as soon as possible. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Additional reporting has been created to monitor distributed general discrepancies though processes need to be updated to check this more regularly.		End of Dec 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

Additional reporting has been created to monitor distributed general discrepancies though processes need to be updated to check this more regularly.	End of Dec 2021	
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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 Ecotricity is responsible for any GIPs.

Audit commentary

Review of the NSP table confirmed that Ecotricity 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 and AC020 report were examined to determine compliance.

Audit commentary

Ecotricity has used the HHA, HHR, RPS, EG1 and PV1 profiles during the audit period. None of the profiles require control device certification.

Audit outcome

Compliant

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

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

Audit observation

Processes relating to defective metering were examined. A sample of defective 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 validation process, or from information provided by the MEP or customer. Upon identifying a possible defective meter, Ecotricity raises a field services job to investigate.

Ecotricity provided one example of a defective meter and two examples of bridged meters. The MEP was notified in all cases.

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

The data collection and clock synchronisation processes were examined.

Ecotricity's agents and MEPs are responsible for the collection of HHR and AMI data. Collection of data and clock synchronisation were reviewed as part of their agent and MEP audits. A sample of clock synchronisation events received by Ecotricity were reviewed.

Audit commentary

HHR data is provided by MEPs and agents. Interrogation requirements and clock synchronisation were reviewed as part of MEP audits and agent audits, compliance is confirmed.

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.

Processes to provide meter condition information were reviewed as part of the agent audits. Ecotricity's processes to manage meter condition information were reviewed, including viewing a sample of meter condition events.

Processes for customer and photo reads were reviewed, including a review of process documentation.

Audit commentary

AMI data is provided by MEPs and manual readings are provided by Wells. Validated readings are derived from actual meter readings.

Condition and no-read information provided by Wells is reviewed and appropriate action is taken.

Ecotricity is aware of the requirements to ensure that customer readings are validated against a set of validated actual reading from another source. If customer readings are used to calculate consumption, the interval data is labelled as estimated. Three examples were checked which confirmed this.

Audit outcome

Compliant

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

Code reference

Clause 6 Schedule 15.2

Code related audit information

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

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

Audit observation

Ecotricity supplies 467 metered ICPs with NHH submission type as of 31 May 2021.

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

Audit commentary

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 except in the case of a switch event meter reading which applies to the end of the day prior to the event date for the losing trader and the start of the event date for the gaining trader as required by this clause.

All AMI systems have a clock synchronisation function, which ensures correct time stamping. Manual readings taken by Wells are applied correctly.

Application of reads was reviewed as part of the historic estimate checks in **section 12.11** and found to be compliant.

The content of CS and RR files was examined in **sections 4.3, 4.4, 4.10** and **4.11**. This found all labelling was correct.

I walked through the process for NHH to HHR and HHR to NHH meter changes, including reviewing five upgrades and all three downgrades. In all cases, the profile change occurred on a meter reading applied to the correct date and time.

Audit outcome

Compliant

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

Code reference

Clause 7(1) and (2) Schedule 15.2

Code related audit information

Each reconciliation participant must ensure that a validated meter reading is obtained in respect of every meter register for every non half hour metered ICP for which the participant is responsible, at least once during the period of supply to the ICP by the reconciliation participant, and used to create volume information.

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

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

Audit observation

The read attainment process was reviewed. I requested a list of all NHH ICPs not read during the period of supply.

Audit commentary

There is a “no read” report containing ICPs where further action is required to obtain reads. This report wasn’t used for a period of time, and the additional actions were not taken.

Nine ICPs were not read during the period of supply, where the period ended between January and April 2021. In three cases, the period of supply was short and the ICPs didn’t get on to the list for further action. The other six ICPs did not meet the “best endeavours, despite exceptional circumstances” threshold.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.8 With: Clause 7(1) and (2) Schedule 15.2 From: 01-Jan-21 To: 30-Apr-21	Nine ICPs not read during the period of supply. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3
Audit risk rating	Rationale for audit risk rating
Low	Reporting is in place but is not being actioned, therefore the controls are weak. The impact on settlement and participants is minor; therefore the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.	End of Dec 2021	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.	End of Dec 2021	

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

Code reference

Clause 8(1) and (2) Schedule 15.2

Code related audit information

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

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

Audit observation

The meter reading process was examined. Monthly reports were provided and reviewed to determine whether they met the requirements of clauses 8 and 9 of schedule 15.2.

All ICPs not read in the 12 months ending 30 April 2021 were read were reviewed to determine whether exceptional circumstances existed and if Ecotricity had used their best endeavours to obtain readings.

Audit commentary

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 12 months	NSPs <100% read	ICPs unread for 12 months	Overall percentage read
Feb 2021	89	3	3	99.02%
Mar 2021	88	2	2	99.35%
Apr 2021	89	5	5	98.38%

As discussed in **section 6.8**, reporting is in place to identify unread meters, but this report has not been routinely actioned during the audit period.

All ICPs not read in the 12 months ending 30 April 2021 were reviewed to determine whether exceptional circumstances existed and if Ecotricity had used their best endeavours to obtain readings. For four of five

ICPs, best endeavours were not demonstrated, because the actions to get reads have only recently been taken.

Copies of the meter reading frequency reports to the Electricity Authority for February to April 2021 were provided. The content met the requirements of the Code, and the reports were sent on time.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.9 With: Clause 8(1) and (2) Schedule 15.2 From: 01-Dec-20 To: 30-Apr-21	Best endeavours not met for four ICPs not read in the 12-month period. Potential impact: Low Actual impact: Low Audit history: None Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Reporting is in place but is not being actioned, therefore the controls are weak. The impact on settlement and participants is minor; therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.		End of Dec 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.		End of Dec 2021	

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

Code reference

Clause 9(1) and (2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

The meter reading process was examined. Monthly reports were provided and reviewed to determine whether they met the requirements of clauses 8 and 9 of schedule 15.2.

All four ICPs not read in the four months ending April 2021 were reviewed to determine whether exceptional circumstances existed and if Ecotricity had used their best endeavours to obtain readings.

Audit commentary

The monthly meter reading reports provided were reviewed.

Month	Total NSPs where ICPs were supplied > 4 months	NSPs <90% read	ICPs unread for 4 months	Overall percentage read
Feb 2021	96	4	6	98.32%
Mar 2021	95	1	2	99.43%
Apr 2021	99	4	7	98.04%

As discussed in **section 6.8**, reporting is in place to identify unread meters, but this report has not been routinely actioned during the audit period.

All four ICPs not read in the four months ending April 2021 were reviewed to determine whether exceptional circumstances existed and if Ecotricity had used their best endeavours to obtain readings. Best endeavours were not demonstrated for two of the four ICPs.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.10 With: Clause 9(1) and (2) Schedule 15.2 From: 01-Jan-21 To: 30-Apr-21	Two ICPs not read in the 4-month period. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Weak Breach risk rating: 3
Audit risk rating	Rationale for audit risk rating
Low	Reporting is in place but is not being actioned, therefore the controls are weak. The impact on settlement and participants is minor; therefore the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.	End of Dec 2021	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.	End of Dec 2021	

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

Ecotricity has used Wells to conduct manual meter readings. I checked the Wells audit report for compliance.

Audit commentary

The Wells audit report confirms compliance with this requirement.

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 and agents. Compliance was assessed as part of their audits.

Audit commentary

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

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 and agents. Interrogation requirements and clock synchronisation were reviewed as part of their audits.

Audit commentary

Fulfilment of the interrogation systems requirements was examined as part of the MEP and agent audits, and found to be compliant.

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 and agents. Interrogation requirements and clock synchronisation were reviewed as part of their audits.

Audit commentary

Fulfilment of the interrogation systems requirements was examined as part of the MEP and agent audits, and found to be compliant.

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 and agents. Interrogation requirements and clock synchronisation were reviewed as part of their audits.

Audit commentary

Fulfilment of the interrogation systems requirements was examined as part of the MEP and agent audits, and found to be compliant.

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 agents, and compliance is assessed as part of their audits.

Processes to archive and store raw meter data were reviewed.

Audit commentary

Compliance is recorded in the MEP and agent audit reports.

Review of audit trails confirmed that reads cannot be modified 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 Ecotricity for at least 48 months.

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 Ecotricity; 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

I checked the validation and correction processes in place.

Audit commentary

Ecotricity has conducted NHH meter readings and demonstrated that corrections do not overwrite the original reading. Meter readings used during the switch process are often replaced. Ecotricity's system has the ability to record readings as estimates if they are.

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

The HHR correction process was examined, and a sample of corrections were reviewed.

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 in accordance with the code. The methodology for data estimation is as follows.

- Interpolation for small gaps.

Where the number of trading periods missing is below four, then the values will be created by the interpolation method. A straight line will be assumed between the neighbouring values. If meter reads are available, scaling will be performed to scale the estimated values to the total consumption matches the difference between register reads.

- Copy from previous consumption patterns.

For gaps larger than four trading periods estimated using interpolation, a consumption pattern matching process is applied. This process uses the same day over previous weeks (excluding statutory holidays). If meter reads are available, scaling is performed to scale the estimated values to match the difference between reads.

- Average consumption value.

If the above two methods cannot be used, robotron*esales creates consumption based on the average daily kWh information received in the CS file using a generic profile (type of customer).

- General consumption profile.

When there is no other information available, a general consumption profile representing an average customer pattern is used.

Clause 19(5) of Schedule 15.2 requires that if a reconciliation participant corrects or alters data under this clause, the reconciliation participant must generate and archive a journal that contains the following information:

- (a) the date of the correction or alteration, and
- (b) the time of the correction or alteration, and
- (c) the operator identifier for the person within the reconciliation participant who made the correction or alteration, and
- (d) the half hour meter reading data or the non-half hour meter reading data corrected or altered, and the total difference in volume of such corrected or altered data, and
- (e) the technique used to arrive at the corrected data, and
- (f) the reason for the correction or alteration.

When Ecotricity conducts corrections, the journal contains the details listed above. I checked the details for one correction to confirm compliance.

Audit outcome

Compliant

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

Code reference

Clause 19(3) Schedule 15.2

Code related audit information

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

Audit observation

The registry list was reviewed to identify any ICPs which require loss compensation.

Audit commentary

Ecotricity has not supplied ICPs with 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 **sections 2.1, 8.1 and 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.

Ecotricity only corrects working data and they keep an appropriate audit trail. 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 2.1, 8.1, 8.2 and 9.4.**

Audit commentary

Read types are recorded correctly. I checked approximately 30 examples to confirm compliance.

Audit outcome

Compliant

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

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

Processes for derivation of volumes were discussed and observed.

Audit commentary

Data provided by MEPs and agents is considered “actual”. Estimates created by Ecotricity are identified as estimates. Some estimates become permanent if they are not replaced. All readings and interval data are correctly identified.

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 and agents. Compliance was assessed as part of their MEP and agent audits.

Audit commentary

The MEPs and agents retain raw, unrounded data. Meter reading data is not rounded or truncated on import.

The AMS and EDM I audits recorded that the EIEP3 file format round trading period data to two decimal places. The relevant ICPs are as follows:

- 0000542107TUDC5, 1002055780UN1C7, 0212987836LC506 and 0166860298LC09C for EDM I, and
- 0000047509HB048 and 0110111503PS856 for AMS.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 9.3 With: Clause 3(5) of schedule 15.2 From: 01-Dec-20 To: 30-Apr-21	AMS and EDM I's EIEP3 file format rounds trading period data to 2 decimal places. 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 rated as moderate because data includes all decimal places provided for most ICPs. The impact is assessed to be low for the EIEP3 format, because a small number of ICPs are expected to be affected and the issue only affects the third decimal place under certain circumstances.		
Actions taken to resolve the issue		Completion date	Remedial action status

As AMS and EDMI are providing the rounded data, we are unable to control how the data is supplied. Therefore, compliance will be achieved once the file format is updated.	Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur	Completion date	
As AMS and EDMI are providing the rounded data, we are unable to control how the data is supplied. Therefore, compliance will be achieved once the file format is updated.	Ongoing	

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 estimates were reviewed. Revised data was compared to estimates where the estimates had been replaced.

Audit commentary

The process for estimation and correction is described in **section 8.2**.

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

Ecotricity has a robust process in place to follow up with MEPs when data is incomplete. Intellihub estimates are not used.

I checked the total quantity of estimates for the 14-month revision for April 2020 and it was 0.5%. I recommend reporting is developed to show the quantify of estimated data for each month per MEP to assist with process improvements.

Recommendation	Description	Audited party comment	Remedial action
Regarding Clause 15 Schedule 15.2	Report on quantity of estimated HHR data per month per MEP for each revision.	Ecotricity will aim to create this report though work to resolve the non-compliance points as a priority.	Identified

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

I checked the validation process to confirm compliance.

Audit commentary

The following validation steps are in place using a query called “check meter reads”:

- difference in average daily consumption compared to the previous read to read period,
- negative consumption, and
- zero consumption.

Meter readings will not load if there isn't an ICP, meter and register match. They also won't load if there is a date mis-match.

I recommend an additional check is implemented for consecutive zeros, where an ICP had consumption then the consumption was zero for a pre-determined period.

Recommendation	Description	Audited party comment	Remedial action
Regarding Clause 16 Schedule 15.2	Add an additional NHH validation for changes from consumption to zero consumption for consecutive periods.	A report will be created to monitor ICPs with consecutive zero consumption to determine any issues and resolve.	Identified

There is also reporting for consumption on inactive ICPs.

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 the meter and data storage device event log for any event that could have affected the integrity of metering data must be investigated.

17(4)(g) – a review of the relevant metering data where there is an event that could have affected the integrity of the metering data

If there is an event that could affect the integrity of the metering data (including events reported by MEPs, but excluding where the MEP is responsible for investigating and remediating the event) the reconciliation must investigate and remediate any events.

If the event may affect the integrity or operation of the metering installation the reconciliation participant must notify the metering equipment provider.

Audit observation

I reviewed the HHR data validation process, including meter event logs.

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.

Robotron*esales validates data on import. The validation includes:

- missing values: all import objects are constantly checked for missing values for the duration of a valid contract; “missing value” status is set and can be checked by the user,
- unexpected zero values: the daily consumption is checked for the lower threshold of zero; potential bridged meters are thereby identified,
- high values: threshold for individual values is currently set to 100kWh and for daily sum to 1000kWh,
- compare to previous patterns: deviation between daily sum and previous days sum must be lower than 500%, and
- receive unexpected data: if data for dates older than one month are received, they will not be automatically imported; the user is notified and has to accept it manually.

Additionally, all meter data could be view graphically, which is an efficient way of checking flow patterns for each customer.

Event logs are provided by all relevant MEPs, but they are not routinely checked. If emails are sent by MEPs in relation to specific ICPs, these are actioned, but there is a requirement to investigate all events.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 9.6 With: Clause 17 Schedule 15.2 From: 01-Dec-20 To: 09-Jul-21	Event logs not routinely checked. Potential impact: Medium Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because most validations occur. The impact on settlement and participants is minor; therefore the audit risk rating is low. Phase failure, reverse power and meter critical events are individually emailed by MEPs.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ecotricity has identified the different ways event log files are received and will work to develop a process to monitor/investigate these.		End of Mar 2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity has identified the different ways event log files are received and will work to develop a process to monitor/investigate these.		End of Mar 2022	

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 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

Ecotricity is not responsible for any NSPs. No information is provided to the grid owner 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 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 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

Ecotricity is not responsible for any NSPs. No information is provided to the grid owner 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

Ecotricity is not responsible for any NSPs. No information is provided to the grid owner 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 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

Ecotricity is not responsible for any NSPs. No information is provided to the grid owner 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. I checked whether any breach allegations had been made.

Audit commentary

Examination of the registry list with history found that Ecotricity has used the HHA, HHR, RPS, EG1 and PV1 profiles.

Trading notifications are only required for the HHA profile.

- Ecotricity did not begin using the HHA profile at any NSPs during the audit period.
- Ecotricity ceased using the HHA profile at CPK0331 and TKR0331 on 28 February 2021. Because they continued trading at the NSPs on other profiles, a trading notification was not created.

No breach allegations were made in relation to trading notifications.

Audit outcome

Compliant

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

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

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

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

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

Audit observation

The process for the calculation of ICP days was examined by checking NSPs with a small number of ICPs to confirm the AV110 ICP days calculation was correct. I reviewed variances for nine months of GR100 ICP days comparison reports.

Alleged breaches were reviewed.

Audit commentary

HHR and NHH ICP days are provided on separate reports. The process for the calculation of ICP days was examined by checking 50 NSPs with HHR ICPs and 50 NSPs with NHH ICPs. The ICP days calculation was confirmed to be correct.

The following table shows the ICP days difference between Ecotricity files and the RM return file (GR100) for all available revisions for nine months. Negative percentage figures indicate that the Ecotricity ICP days figures are higher than those contained on the registry.

Month	Initial	R1	R3	R7
Aug 2020	0.01%	0.00%	0.00%	0.00%
Sep 2020	0.00%	-0.02%	0.00%	0.00%
Oct 2020	-0.03%	0.00%	0.00%	-
Nov 2020	-	0.00%	0.00%	-
Dec 2020	0.00%	-0.03%	-0.02%	-
Jan 2021	-0.02%	-0.02%	-0.02%	-
Feb 2021	-0.02%	-0.02%	-	-
Mar 2021	-0.02%	-0.02%	-	-
Apr 2021	-0.01%	-0.02%	-	-

The discrepancies are small and generally decrease with later revisions. I checked all differences remaining at revision three and confirmed that they were timing differences, and the retailer ICP days matches the current number of active ICP days recorded on the registry.

Audit outcome

Compliant

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

Code reference

Clause 15.7

Code related audit information

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

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

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

Audit observation

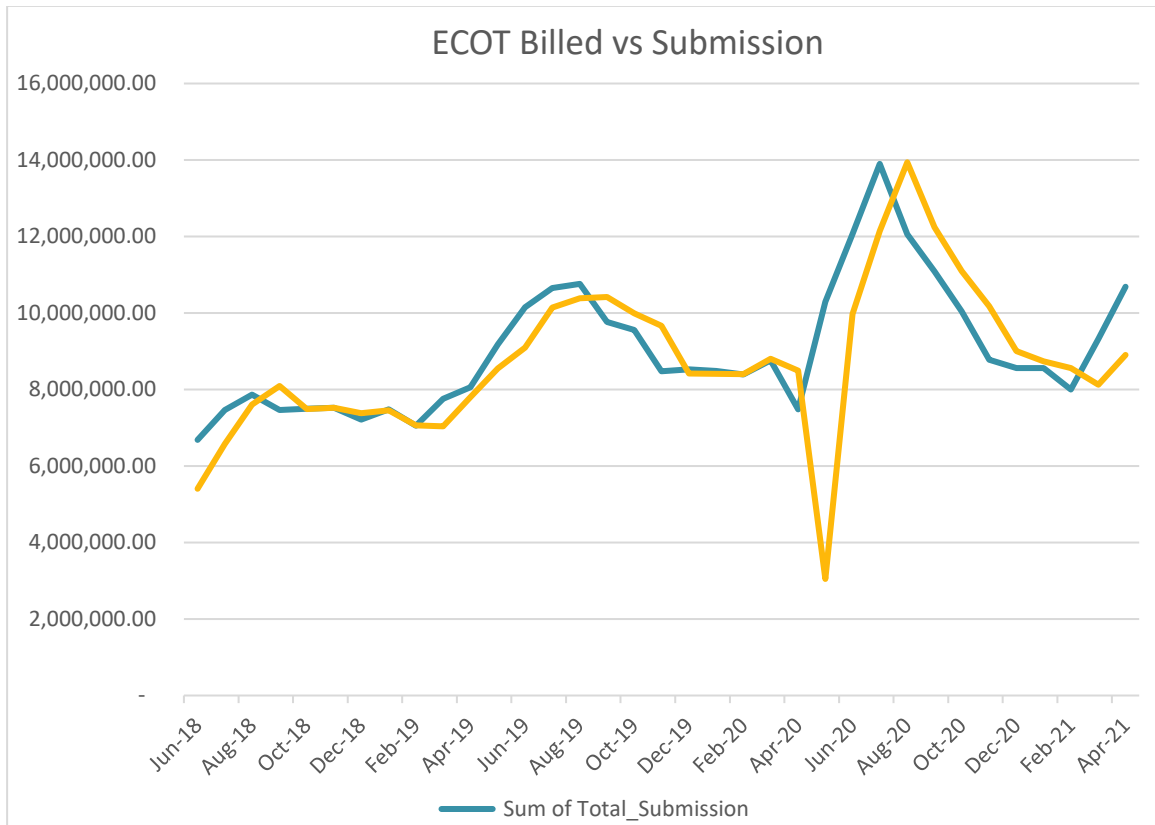
The process for the calculation of as billed volumes was examined by checking five NSPs with a small number of ICPs to confirm the AV120 calculation was correct.

GR130 reports for June 2018 to April 2021 were reviewed to confirm whether the relationship between billed and submitted data appears reasonable.

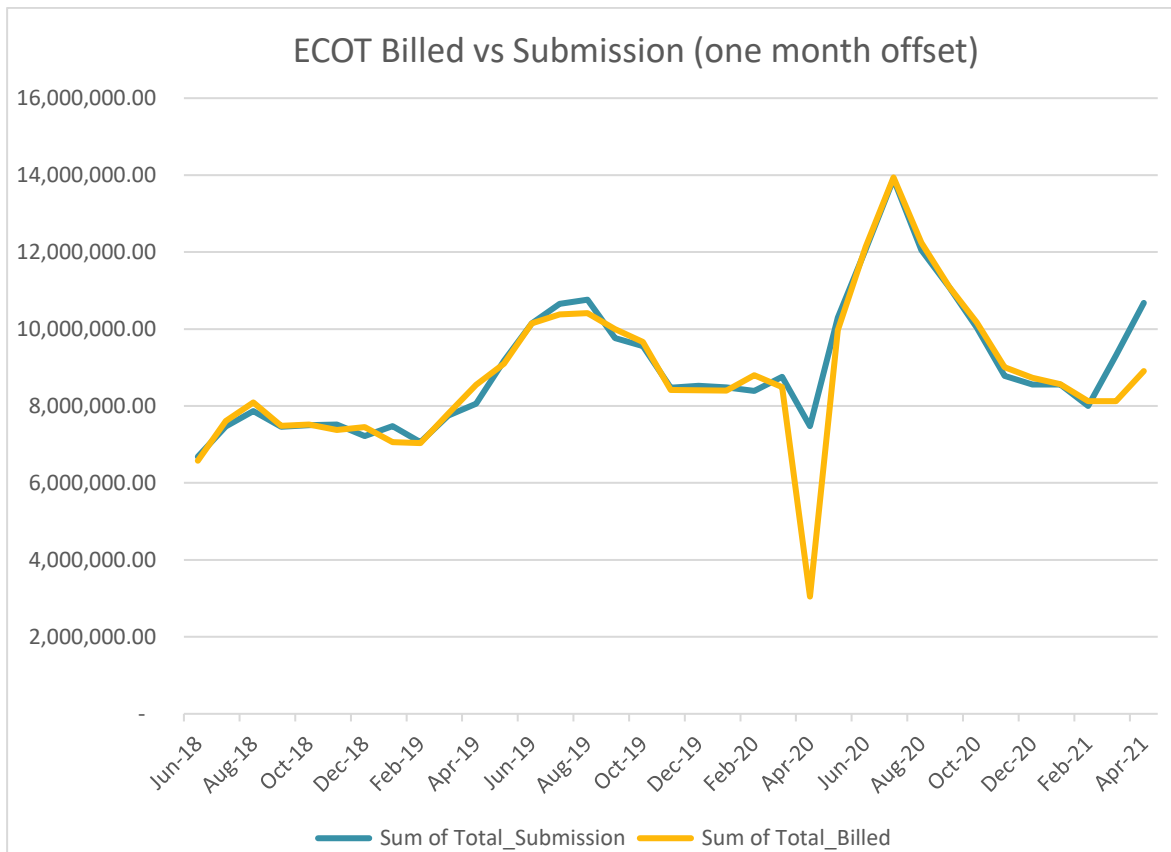
Audit commentary

The process for the calculation of “as billed” volumes was examined by checking March 2021 AV120 submissions for five NSPs with a small number of ICPs against invoice information. The AV120 billed consumption calculation was confirmed to be correct for four of the five NSPs checked. One ICP at NSP SOH0011 had 54 kWh on the invoice, but 108 kWh (exactly double) in the electricity supplied file. This is a system issue that Ecotricity is working on.

I checked the difference between submission and electricity supplied information for June 2018 to April 2021, and the results are shown below. The difference between billed and submitted data for the year ended March 2021 is 6.4% (billed higher than submitted) and the two years ended March 2021 is 3.0% (billed higher than submitted). Most of the difference relates to May 2020, where the robotron*esales and Agility billed volumes should have been added together, but they were not. The remaining differences appear to mainly relate to timing.



One the billed and submitted data are aligned to account for the one month offset between billed and submission data, it is more closely aligned.



Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.3 With: Clause 15.7 From: 01-Apr-20 To: 09-Jul-21	Electricity supplied file incorrect for NSP SOH0011. Incorrect electricity supplied for May 2020. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We are aware of the issue that caused the duplication of the kWh for NSP SOH0011 and are working to resolve this to ensure it does not occur again. We have resubmitted the AV120 file for May 2020 with the correct information in the month 14 submission.		Ongoing 19/07/2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We are aware of the issue that caused the duplication of the kWh for NSP SOH0011 and are working to resolve this to ensure it does not occur again. We have resubmitted the AV120 file for May 2020 with the correct information in the month 14 submission.		Ongoing 19/07/2021	

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 whether the process for the calculation and aggregation of HHR data was correct, by:

- matching HHR aggregates information with the HHR volumes data, and
- tracing volumes for three HHR settled ICPs from the source to the HHR aggregates submissions.

The GR090 ICP missing files for August 2020 to April 2021 were examined. A sample of the 20 ICPs missing from the most revisions were checked to determine why they were missing.

Audit commentary

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

I checked the process for aggregation of HHR data:

- I matched HHR aggregates volumes to the source files received from the three MEPs for three ICPs and I found a match for all three ICPs, and
- I matched HHR volumes and aggregates for ten months and revisions; the table below shows the variances and reasons for the variances.

Month	Revision	Vols	Aggs	Diff	Comments
Mar 20	Ri	8,173,865	8,173,044	822	Corrections were made to the aggs file but not the vols file.
Mar 20	R1	8,279,253	8,275,093	4,160	Corrections were made to the aggs file but not the vols file.
Mar 20	R3	8,283,913	8,395,641	-111,728	File from robotron*esales had many missing ICPs, which were added to the aggs file but not the vols file.
Mar 20	R7	8,450,820	8,450,722	98	Small variances across many NSPs due to rounding.
Mar 20	R14	8,358,076	8,357,919	157	Corrections were made to the aggs file but not the vols file.
Jun 20	Ri	10,949,923	10,971,392	-21,468	Missing "groups" led to ICPs being excluded from the vols file.
Jun 20	R1	11,305,475	11,310,373	-4,897	Corrections were made to the aggs file but not the vols file.
Jun 20	R3	11,455,379	11,454,183	1,196	Corrections were made to the aggs file but not the vols file.
Jun 20	R7	11,492,084	11,491,894	191	Corrections were made to the aggs file but not the vols file.
Dec 20	Ri	8,305,973	8,429,558	-123,586	Missing "groups" led to ICPs being excluded from the vols file.

					One loss code for HOB1101 led to no consumption being submitted for this NSP.
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Ecotricity is now conducting a manual check between the HHR aggregates and HHR volumes files each month to identify discrepancies.

HHR data accuracy issues identified during the previous audit were re-checked:

2020 issue	2021 finding
42 ICPs with an installation type of "B" did not have generation kWh recorded in the April 2020 R3 HHR aggregates file. Five of the 42 had a record in the R7 file and 25 of the 42 had a record in the May 2020 R7 file.	I identified 35 ICPs with HHA or HHR profile, and installation type of B, and an I flow register which did not have I flow rows in the HHR aggregates submissions. All 35 had their I flow registers installed after the HHR aggregates reconciliation periods. None were genuine exceptions.
ICP 1001152652CKABE switched to Ecotricity on 06/11/19 with a status of inactive. Consumption was present, but the status was not corrected until 23/11/20. Submission does not automatically occur unless ICPs are at the "active" status. Submission has not occurred for 3,883.364 kWh between November 2019 and December 2020. The 14-month revision will include submission for this ICP.	Submission only occurred from May 2020. Data was not extracted from Agility to conduct revisions for November 19 to April 20. Approx. 1,600 kWh was not submitted.
The HHR aggregates file is not always complete and Ecotricity then adds a "zero" record to the file for each missing ICP. I requested a list of ICPs for August, September, and October for R3 of ICPs not recorded in the file and what the consumption should have been.	I checked the latest revisions for March 2020, June 2020, and December 2020 for ICPs with zero total consumption. The March 2020 file had 10 ICPs with non-genuine zero consumption. Most of the issues were due to data migration. Revisions cannot occur for these ICPs because the 14-month revision has been completed.
The HHR aggregates file contains records for ICPs that have switched out or have been changed to NHH. The issue is that some ICPs remain "active" in robotron*esales because there is not a valid end date for the ICP. For August, September and October 2020 there were 14 ICPs removed from the HHR aggregates file, totalling 3,939.52 kWh. The corresponding changes have not been made to the HHR vols file.	The June 2020 file had eight ICPs with non-genuine zeros. These are all being investigated and resolved to ensure volume is in the files for R-14. I checked the latest revision for December 2020 and found no evidence of these issues: <ul style="list-style-type: none"> no ICPs included in the aggregates had switched out prior to December 2020, seven ICPs included in the aggregates currently have NHH profiles, all were downgraded after December 2020, and three ICPs included in the aggregates have been decommissioned, all were decommissioned in December 2020 or later.
When adjustments are made to the HHR aggregates file, there are no corresponding adjustments made to the HHR vols file.	This is no longer occurring. August to October 2020 had under-submission of 90,815.71 kWh. Revisions have reduced this to 18,107.6 kWh. A further 16,941.75 kWh has recently been corrected, leaving 840 kWh to be addressed for August 2020 in the 14-month revision.

The GR090 ICP missing files for August 2020 to April 2021 were examined. I checked the 20 ICPs missing from the most revisions and found they were missing due to backdated profile changes or switch withdrawals.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.4 With: Clause 15.8 From: 01-Nov-19 To: 09-Jul-21	HHR aggregates file does not contain electricity supplied information. Errors in aggs file between March and December 2020. Under submission of 18,107.6 kWh due to ICPs missing from aggs file. 1,600 kWh not included in R-14 for an inactive ICP with consumption. Potential impact: High Actual impact: Medium Audit history: Multiple times Controls: Moderate Breach risk rating: 4		
Audit risk rating	Rationale for audit risk rating		
Medium	Controls are rated as moderate at the time of the audit, because the validation reporting has been improved and the analysis of December 2020 files shows manual interventions are no longer a significant issue. The impact is assessed to be medium because the kWh differences have been reduced.		
Actions taken to resolve the issue		Completion date	Remedial action status
Regarding the HHR aggregate files not containing electricity supplied information, compliance here will be achieved once the Authority completes the intended Code change to be aligned with the RM functional specification. Ecotricity has implemented a process to compare the HHR aggregates and HHR volumes files to check/resolve discrepancies each month. A report has been created to monitor consumption on inactive ICPs which we will monitor on a more regular basis to identify/resolve these issues to include consumption data in submissions.		Ongoing Jan 2020 End of	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	

Non-compliance	Description	
<p>Regarding the HHR aggregate files not containing electricity supplied information, compliance here will be achieved once the Authority completes the intended Code change to be aligned with the RM functional specification.</p> <p>Ecotricity has implemented a process to compare the HHR aggregates and HHR volumes files to check/resolve discrepancies each month.</p> <p>A report has been created to monitor consumption on inactive ICPs which we will monitor regularly to identify/resolve these issues to include consumption data in submissions.</p>	Ongoing	
	Jan 2020	
	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 the TPR technique.

Audit observation

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

The daylight savings adjustment process was reviewed 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.

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 and NHH ICPs were checked to ensure that volumes were correctly recorded.

Corrections are discussed in **sections 2.1, 8.1 and 8.2**, and I checked for alleged breaches regarding late files.

Audit commentary

HHR

I checked the accuracy of the HHR aggregates and HHR volumes files in **section 11.4**.

I matched HHR volumes and aggregates for ten months and revisions. The table below shows the variances and reasons for the variances.

Month	Revision	Vols	Aggs	Diff	Comments
Mar 20	Ri	8,173,865	8,173,044	822	Corrections were made to the aggs file but not the vols file
Mar 20	R1	8,279,253	8,275,093	4,160	Corrections were made to the aggs file but not the vols file
Mar 20	R3	8,283,913	8,395,641	-111,728	File from robotron*esales had many missing ICPs, which were added to the aggs file but not the vols file.
Mar 20	R7	8,450,820	8,450,722	98	Small variances across many NSPs due to rounding
Mar 20	R14	8,358,076	8,357,919	157	Corrections were made to the aggs file but not the vols file
Jun 20	Ri	10,949,923	10,971,392	-21,468	Missing "groups" led to ICPs being excluded from the vols file.
Jun 20	R1	11,305,475	11,310,373	-4,897	Corrections were made to the aggs file but not the vols file
Jun 20	R3	11,455,379	11,454,183	1,196	Corrections were made to the aggs file but not the vols file
Jun 20	R7	11,492,084	11,491,894	191	Corrections were made to the aggs file but not the vols file
Dec 20	Ri	8,305,973	8,429,558	-123,586	Missing "groups" led to ICPs being excluded from the vols file. One loss code for HOB1101 led to no consumption being submitted for this NSP.

Ecotricity is now conducting a manual check between the HHR aggregates and HHR volumes files each month to identify discrepancies.

HHR data accuracy issues identified during the previous audit were re-checked:

2020 issue	2021 finding
42 ICPs with an installation type of "B" did not have generation kWh recorded in the April 2020 R3 HHR aggregates file. Five of the 42 had a record in the R7 file and 25 of the 42 had a record in the May 2020 R7 file.	I identified 35 ICPs with HHA or HHR profile, and installation type of B, and an I flow register which did not have I flow rows in the HHR aggregates submissions. All 35 had their I flow registers installed after the HHR aggregates reconciliation periods. None were genuine exceptions.

2020 issue	2021 finding
ICP 1001152652CKABE switched to Ecotricity on 06/11/19 with a status of inactive. Consumption was present, but the status was not corrected until 23/11/20. Submission does not automatically occur unless ICPs are at the “active” status. Submission has not occurred for 3,883.364 kWh between November 2019 and December 2020. The 14-month revision will include submission for this ICP.	Submission only occurred from May 2020. Data was not extracted from Agility to conduct revisions for November 19 to April 20. Approx. 1,600 kWh was not submitted.
The HHR aggregates file is not always complete and Ecotricity then adds a “zero” record to the file for each missing ICP. I requested a list of ICPs for August, September, and October for R3 of ICPs not recorded in the file and what the consumption should have been.	I checked the latest revisions for March 2020, June 2020, and December 2020 for ICPs with zero total consumption. The March 2020 file had 10 ICPs with non-genuine zero consumption. Most of the issues were due to data migration. Revisions cannot occur for these ICPs because the 14-month revision has been completed.
The HHR aggregates file contains records for ICPs that have switched out or have been changed to NHH. The issue is that some ICPs remain “active” in robotron*esales because there is not a valid end date for the ICP. For August, September and October 2020 there were 14 ICPs removed from the HHR aggregates file, totalling 3,939.52 kWh. The corresponding changes have not been made to the HHR vols file.	The June 2020 file had eight ICPs with non-genuine zeros. These are all being investigated and resolved to ensure volume is in the files for R-14. I checked the latest revision for December 2020 and found no evidence of these issues: <ul style="list-style-type: none"> • No ICPs included in the aggregates had switched out prior to December 2020 • Seven ICPs included in the aggregates currently have NHH profiles, all were downgraded after December 2020 • Three ICPs included in the aggregates have been decommissioned, all were decommissioned in December 2020 or later.
When adjustments are made to the HHR aggregates file, there are no corresponding adjustments made to the HHR vols file.	This is no longer occurring. August to October 2020 had under-submission of 90,815.71 kWh. Revisions have reduced this to 18,107.6 kWh. A further 16,941.75 kWh has recently been corrected, leaving 840 kWh to be addressed for August 2020 in the 14-month revision.

NHH

I checked NHH ICPs with vacant consumption, distributed generation and unmetered load. The following NHH issues were identified:

- two inactive ICPs with consumption are yet to be resolved to ensure submission occurs; the ICPs are 0000163123WEEE2 (18 kWh) and 0001490427TG8E5 (558 kWh),
- all unmetered consumption was correct, and
- distributed generation consumption was correct.

NHH data accuracy issues identified during the previous audit were re-checked:

2020 issue	2021 finding
ICP 0000049398NT9AB had generation kWh submitted in the HHR files, despite it being a NHH ICP. The consumption was manually removed from the aggregates file but not the vols file. Removing the consumption from the aggregates file means the ICP does not appear on the ICPMISS report.	The generation kWh were removed from the aggs and vols files and appear in the NHH vols file.

Distributed Generation

27 ICPs do not have I-flow meter registers, or have I-flow meter registers but the settlement indicator is set to no. 13 of the 27 had correct metering installed by the date of the audit report. Submission only occurs from the date metering is installed or available, which was an average delay of 225 days. Nine were within 50 days. 14 still don't have appropriate metering and the average number of days from solar installation or from the ICP switching to Ecotricity is 328.

As recorded in **section 1.6**, there were several examples of incorrect or late submissions during the audit period. The details are shown below.

Reference	Status	Result	Clause(s)	Summary
2101ECOT1	closed	early closure	Part 15 clause 15.12	ECOT was notified of an incorrect AV-090 HHRVOLS submission on the Y LINE NSP for the August 2019 R14 revision. ECOT resubmitted their data at 10:40am on the 20th of October.
2104ECOT3	fact finding	no result yet	Part 15 clause 15.2 (1) (a)	Ecotricity (ECOT) failed to deliver accurate information to the reconciliation manager in their AV-090 (HHR submission file). RM noticed that in the volume change from R3 to R7 for their September 2020 submission changed a lot in their HHR volumes submission. RM reached out to ECOT to confirm that the change in submission volume was as intended. ECOT notified RM that there was an error in their system and that there was two NSPs; BRY0661 and HOB1101. As a result, ECOT was missing around 500,000kWh of volume from their submission between both NSPs.
2105ECOT1	fact finding	early closure	Part 15 Schedule 1 5.4 (1)	ECOT failed to submit information to the reconciliation manager by 1600 hours on the 4th business day of the reconciliation period.
2105ECOT2	draft	no result yet	15.2(1)(a) Requirement to provide complete and accurate information	Ecotricity Limited (ECOT) failed to provide accurate information to the reconciliation manager. ECOT was notified by the RM on 20/05/2021 about unusual changes in volumes for their NHH I flows for 202003 R14. After investigation ECOT confirmed the volumes submitted were incorrect due to their system's high estimation of volumes. Rules: 15.2(1)(a) Requirement to provide complete and accurate information

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 12.2</p> <p>With: Clause 15.4</p> <p>From: 01-Dec-20</p> <p>To: 09-Jul-21</p>	<p>Errors in aggs file between March and December 2020.</p> <p>Under submission of 18,107.6 kWh due to ICPs missing from aggs file.</p> <p>1,600 kWh not included in R-14 for an inactive ICP with consumption.</p> <p>Submission of 576 kWh yet to occur for two inactive NHH ICPs with consumption.</p> <p>NHH generation kWh not submitted at the earliest opportunity.</p> <p>Some incorrect and late files as shown in the breach report.</p> <p>Potential impact: High</p> <p>Actual impact: Medium</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>Controls are rated as moderate at the time of the audit, because the validation reporting has been improved and submission issues are being identified and resolved in a more timely manner.</p> <p>The impact is assessed to be medium because the kWh differences have been reduced.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Ecotricity has implemented a process to compare the HHR aggregates and HHR volumes files to check/resolve discrepancies each month.</p> <p>A report has been created to monitor consumption on inactive ICPs which we will monitor on a more regular basis to identify/resolve these issues to include consumption data in submissions.</p> <p>Processes are continuously improving to ensure files are submitted correctly and on time.</p>		Jan 2020	Identified
		Ongoing	
Preventative actions taken to ensure no further issues will occur		Completion date	

<p>Ecotricity has implemented a process to compare the HHR aggregates and HHR volumes files to check/resolve discrepancies each month.</p> <p>A report has been created to monitor consumption on inactive ICPs which we will monitor on a more regular basis to identify/resolve these issues to include consumption data in submissions.</p> <p>Processes are continuously improving to ensure files are submitted correctly and on time.</p>	<p>Jan 2020</p> <p>Ongoing</p>	
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12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

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

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

Audit commentary

Ecotricity processes registry notification files to ensure aggregation factors, including NSPs, are correct. There is a monthly check of a list file with history prior to submission.

There were no incorrect NSP issues identified and there are no examples of “gifted” generation.

GR170 and AV080 files for nine months and revisions were checked, and no issues with zeroing were identified. Robotron*esales automatically populates zeros where they are required.

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 Ecotricity is not a grid owner.

Audit commentary

Review of the NSP table confirmed that Ecotricity 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 Ecotricity does not own any local or embedded networks.

Audit commentary

Ecotricity 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

Ecotricity 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

I checked processes to ensure revisions are conducted and are accurate. Corrections were reviewed in **sections 2.1, 8.1, and 8.2**. Alleged breaches were reviewed.

Audit commentary

Arc Innovations meters settled as HHR

There is an issue with ARC Innovations meters when used for HHR settlement. The on-site setup is that a meter pulses into a data storage device, which counts the pulses and “stores” them every 200 pulses which equals 0.1 kWh. There is only one decimal place, so the smallest increment of consumption is 0.1. Ecotricity supplies 496 HHR settled ICPs with ARCS as the MEP; all have meter category 1 and the multiplier flag set to N. Unfortunately for Ecotricity, the HHR data derived from ARC meters is not considered to be accurate in accordance with Clause 15.2. The total kWh per month will be accurate but if volumes are not recorded and reported against the correct trading period, Ecotricity may not be charged at the wholesale rate that applied during the trading period when the electricity was consumed. Compliance is recorded in this section, because Ecotricity is unable to obtain more accurate information.

Corrections

I checked that corrections were included in revision files and that when more accurate information was available it was submitted. I have recorded in several sections that revisions have been conducted or will be conducted. In **sections 11.4 and 12.2**, I have recorded that some submission files are inaccurate despite more accurate data being available.

The previous audit recorded non-compliance because ICP 1001152652CKABE was inactive from the switch in date of 6 November 2019, but there was consumption of 3,883 kWh during this period. The status has been corrected, but the revision for volume was only conducted out of robotron*esales from May 2020; volume was not created from Agility for the earlier period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.7 With: Clause 15.12 From: 01-Dec-20 To: 09-Jul-21	The most accurate data is not submitted in submission files when the following issues are identified: <ul style="list-style-type: none"> • missing ICPs, • additional ICPs, • consumption on inactive ICPs, and • generation present at ICPs. Potential impact: High Actual impact: Medium Audit history: Once Controls: Moderate Breach risk rating: 4		
Audit risk rating	Rationale for audit risk rating		
Medium	Controls are rated as moderate at the time of the audit, because the validation reporting has been improved and submission issues are being identified and resolved in a more timely manner. The impact is assessed to be medium because the kWh differences have been reduced.		
Actions taken to resolve the issue		Completion date	Remedial action status
Validation reporting and improved processes have helped Ecotricity improve the accuracy of data in submission files. Further improvements and review of processes will continue to work towards resolving the identified issues.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Validation reporting and improved processes have helped Ecotricity improve the accuracy of data in submission files. Further improvements and review of processes will continue to work towards resolving the identified issues.		Ongoing	

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

Code reference

Clause 4 Schedule 15.2

Code related audit information

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

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

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

Audit observation

NHH volumes 14-month revisions were reviewed for January to March 2020 to identify any forward estimate still existing. A sample of AV080 aggregation rows with forward estimate remaining at the 14-month revision were checked.

Audit commentary

Standard reporting is not in place to identify the quantity of HHR estimates in the 14-month revision. All HHR estimates are considered permanent if they are not replaced.

As recorded in **section 9.4**, I recommend reporting is developed and monitored to record the quantity of HHR estimates per month per MEP to assist with improving service levels.

AV080 submissions were reviewed to identify the quantity of forward estimate remaining at revision 14:

Month	Forward estimate at revision 14
Jan-20	58,792.17
Feb-20	68,955.22
Mar-20	20,637.75
Grand Total	148,385.14

A sample of ten AV080 aggregation lines with forward estimate remaining were reviewed. Forward estimates remained for the following reasons:

- six ICPs had missing start reads as a result of migration from Agility to robotron*esales,
- shape files were missing for one ICP; reporting is being developed to identify missing shape files,
- two ICPs did not have readings, and
- one ICP had X flow inserted into the I-flow row.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 12.8 With: Clause 4 Schedule 15.2 From: 01-Jan-20 To: 09-Jul-21	Estimates not all replaced by the 14-month revision. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating

Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ecotricity has identified the ICPs with forward estimates from the reasons mentioned on the previous page. Work will be completed to resolve ICPs that are yet to have the 14-month revision submitted.		End of Aug 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ecotricity has identified the ICPs with forward estimates from the reasons mentioned on the previous page. Work will be completed to resolve ICPs that are yet to have the 14-month revision submitted.		End of Aug 2021	

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

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

Aggregation and content of reconciliation submissions was reviewed, and the registry lists were reviewed.

Audit commentary

Compliance with this clause was assessed:

- all ICPs had submission flags consistent with their metering category,
- nine ICPs with unmetered load had accurate submission,
- no profiles requiring a certified control device are used,
- no loss or compensation arrangements are required, and
- 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

Nine AV080 submissions for revisions 3 to 14 were reviewed to confirm that historic estimates are included and identified. Permanence of meter readings is reviewed in **section 12.8**. The methodology to create forward estimates is reviewed in **section 12.12**.

Audit commentary

I reviewed a diverse sample of nine AV080 submissions, including a diverse sample of months and revisions. Forward and historic estimates are included and identified.

Audit outcome

Compliant

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

Ecotricity provided examples of historic estimate calculations, which were reviewed. The check of calculations included confirming that readings and Seasonal Adjusted Shape Values (SASV) were applied correctly.

Audit commentary

The SASV (seasonal adjusted shape values) are manually imported each month when they're available.

The table below shows that all scenarios which occurred during the audit period are calculating as expected and correct SASV are applied.

Test	Scenario	Test Expectation	Result
a	ICP becomes Active part way through a month	Consumption is only calculated for the Active portion of the month.	Compliant
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Compliant
c	ICP become Inactive then Active again within a month.	Consumption is only calculated for the Active portion of the month.	Has not occurred
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Compliant
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Has not occurred
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
h	Continuous ICP without a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Compliant
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Compliant

Test	Scenario	Test Expectation	Result
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Compliant
l	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Compliant
m	ICP with a customer read during the month	Customer reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Has not occurred
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate, unless they are validated against a set of actual reads not provided by the customer.	Compliant
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant

Audit outcome

Compliant

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 Schedule 15.3

Code related audit information

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

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

Audit observation

The process to create forward estimates was reviewed.

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

Audit commentary

Forward estimates are based on a field called “expected average daily consumption”, which is based on the previous read to read period, or is manually entered for newly switched in reads, using the previous retailer’s average daily consumption from the CS file.

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

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total Balancing Areas
Sep 2019	0	0	0	0	54
Oct 2019	0	0	0	0	54
Nov 2019	0	0	0	0	53
Dec 2019	0	0	0	0	54
Jan 2020	0	0	0	0	55
Feb 2020	0	0	0	0	53
Mar 2020	0	0	0		53
Apr 2020	0	0	0		53
May 2020	0	0	0		54
Jun 2020	0	0	0		57
Jul 2020	0	0	0		55
Aug 2020	0	0	0		55
Sep 2020	0	0	0		55
Oct 2020	0	0	0		64
Nov 2020	0	0			65
Dec 2020	0	0			67
Jan 2021	0	0			68
Feb 2021	0	0			69
Mar 2021	0				70
Apr 2021	0				70

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

Month	Revision 1	Revision 3	Revision 7	Revision 14
Sep 2019	-19.53%	-14.51%	-14.94%	-15.27%
Oct 2019	-28.57%	-23.62%	-22.74%	-21.35%
Nov 2019	-31.45%	-29.79%	-28.34%	-27.21%
Dec 2019	-31.69%	-24.88%	-25.17%	-24.19%
Jan 2020	-36.90%	-31.64%	-30.96%	-32.16%
Feb 2020	-30.74%	-23.43%	-25.11%	-25.10%
Mar 2020	-11.15%	-17.11%	-10.48%	
Apr 2020	-5.80%	-1.90%	6.06%	
May 2020	-1.14%	-17.33%	-17.23%	
Jun 2020	-9.59%	-16.09%	-20.57%	
Jul 2020	7.91%	-21.15%	-21.95%	
Aug 2020	3.54%	-6.65%	-7.45%	
Sep 2020	-1.36%	-6.71%	-6.58%	
Oct 2020	7.78%	5.81%	8.96%	
Nov 2020	-8.52%	-3.50%		
Dec 2020	-0.76%	8.29%		
Jan 2021	-2.77%	8.66%		
Feb 2021	6.47%	10.10%		
Mar 2021	-10.57%			
Apr 2021	-3.32%			

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 15.3

Code related audit information

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

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

Audit observation

The event detail report was examined to identify all ICPs which had a profile change during the report period. A sample of ICPs with profile changes were reviewed to confirm that there was an actual or permanent estimate reading on the day of the profile change.

Audit commentary

All profile changes are conducted using an actual meter reading on the day of and/or the day before the profile change. I reviewed a sample of ten profile changes and confirmed all were changed on an actual or permanent estimate reading.

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, and
- 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 AV080, 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

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

I reviewed a sample of nine AV080 reports to confirm whether historic estimate requirements were met.

Audit commentary

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

The three, seven and 14-month revision files were examined for a selection of nine submissions and the tables below show that the thresholds were not met for some NSPs for some revisions. Checks of a sample of ICPs confirmed that the thresholds were not met because readings were unable to be obtained, and permanent estimates were not entered in their place. Read attainment is discussed further in **sections 6.8 - 6.10**.

The table below shows the number of NSPs where the threshold was met.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jan 2020	-	-	83	108
Feb 2020	-	-	69	108
Mar 2020	-	-	73	114

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jun 2020	-	73	-	126
Jul 2020	-	89	-	126
Aug 2020	-	99	-	129
Oct 2020	73	-	-	134
Nov 2020	76	-	-	136
Dec 2020	90	-	-	137

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

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Jan 2020	60.53%	-	-
Feb 2020	66.73%	-	-
Mar 2020	77.39%	-	-
Jun 2020	-	73.81%	-
Jul 2020	-	84.55%	-
Aug 2020	-	89.06%	-
Oct 2020	-	-	87.05%
Nov 2020	-	-	83.67%
Dec 2020	-	-	95.15%

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 13.3 With: Clause 10 Schedule 15.3 From: Jan-20 To: Mar-21	Historic estimate thresholds were not met for some revisions. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement. The impact on settlement and participants is minor; therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.		End of Dec 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A report has been created to check ICPs that are not being read though processes need to be updated to check this more frequently.		End of Dec 2021	

CONCLUSION

Since the previous audit, Ecotricity has resolved most of the submission inaccuracy issues. Validation has improved and issues are being identified and resolved in a shorter timeframe. Switching and registry compliance has also improved during the audit period.

There are three new non-compliances that require urgent attention, as follows:

1. Email correspondence to customers intending to switch away asks for reasons for switching, which the Code does not allow.
2. Utilities Disputes information is not present on the website or in outbound communications.
3. Powerswitch information is not present in communications.

Many of the other non-compliances are expected to be remedied as Ecotricity continues to improve processes and reporting. The audit found 29 non-compliance issues, four recommendations are made, and no issues are raised. The audit risk rating is 70, indicating that the next audit be due in three months. Now that Ecotricity has stronger processes in place to ensure revisions are conducted, I recommend the next audit is conducted in nine months, to ensure as much resource as possible is available to continue with improvements.

PARTICIPANT RESPONSE

Ecotricity would like to thank Veritek and our team for their work on this audit. We have reviewed the audit and our detailed comments are supplied throughout the report.

Since the last audit, we have made significant improvements in our processes and are resolving issues in shorter timeframes. Our team have now been using Robotron's eSales for 14 months and have become more familiar with the system while refining workflows and processes. We would like to thank Robotron for all their help and support with this.

We recognise the audit notes three new urgent non-compliance points that require immediate attention. We have since updated email correspondence to exclude asking customers why they are switching to another retailer. We are also in the process of updating our website, external communications, and invoice to include information about Utilities Dispute and Consumer Powerswitch. We expect to have this work completed soon.

We will continue to improve our processes to remedy the non-compliance points raised in this audit and believe we will be able to accomplish this over the next 9 months.