

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT

For



CONTACT ENERGY LIMITED

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EXECUTIVE SUMMARY

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

Contact uses the CTCT, CTCS and CTCX participant codes.

- CTCT is managed directly by Contact and is used for NHH ICPs, HHR ICPs and generation.
- CTCS is managed by **Simply Energy Limited (Simply Energy)** as Contact's agent. CTCS customers are supplied by the Contact Energy brand and may be billed and settled as HHR, NHH or DUML. A pilot group of 100 ICPs switched in on 01/03/20, followed by a tranche of approximately 2,000 customers on 01/06/20. A further two tranches of around 3,000 ICPs are expected to switch in from CTCT over the next few months.
- CTCX is managed by Simply Energy as Contact's agent. CTCX customers are supplied by the Simply Energy brand, and are billed as HHR but may be settled as NHH if their metering does not meet HHR certification requirements.

Up to 31/05/20 EMS collected HHR data and created HHR permanent estimates and submissions for CTCS and CTCX. From 01/06/20, EDMI and AMS began supplying HHR data directly to Simply Energy, and Simply Energy has created the HHR submissions and permanent estimates for CTCS and CTCX. EMS creates NHH submission information for CTCS and CTCX.

Unless otherwise specified, the processes and non-compliances described in the report apply to all codes.

CTCT

CTCT has made steady progress in the management of registry information and switching.

1. Registry discrepancy processes are robust and the resolution of these has improved since the last audit.
2. The timeliness of new connections has improved
3. Discrepancy reporting for new connections has been reinstated to ensure correct active dates.
4. There is a process to identify and rectify reconnected ICPs with expired meter certifications.
5. There have been a number of fixes deployed for switching which has improved data accuracy.

CTCT has also made significant improvements in the reading and reconciliation area during the audit period.

1. Progress has continued to be made with investigating and resolving issues affecting submission accuracy, such as settlement unit issues, phantom meters and investigation and correction of inactive consumption. Good prevention (system and process changes), detection (exception and validation reporting) and correction controls are in place, and the number of affected ICPs has dramatically reduced this year.
2. The number of reconciliation profile discrepancies has reduced from 17,257 in 2018, to 3,301 in 2019 and 337 during this audit. Contact has worked with MEPs to resolve the issues causing the profile discrepancies.

The following key areas require some improvement to increase compliance:

1. **New connections**
Unmetered new connections were disproportionately represented in the late new connections. I recommend this process is reviewed.
2. **MEP nominations**
Incorrect MEP nominations due to the MEP relationship between ORBs and SAP not being aligned.

3. Long term BTS supplies

Historically these haven't been closely managed. I found two examples of ICPs that have complete houses that have been on an unmetered BTS since 2012 and 2014 respectively. Contact are undertaking a data cleanse project of these.

4. Distributed unmetered load

Some distributed unmetered load issues are still existing, leading to incorrect submission information. Some audit reports are overdue. Contact are working with their customers regarding these issues.

5. Switching

The RR process for AMI read requests received within five days of the event date needs reviewing to ensure these are not rejected if an actual read has been sent.

6. Read attainment

The read attainment process still begins after 130 days, making it unlikely that the best endeavours requirements for read attainment will be met where the period of supply is less than 11 months. Following the transition to MRS in July 2019, resourcing issues resulted in poor read attainment in some areas and communications to customers regarding read attainment were temporarily suspended as a result. This combined with the COVID-19 lockdown, caused a decrease in read attainment during the audit period.

7. Read dates

Where a read is not obtained for all registers on the meter read order date, SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. An exception is generated where the read dates do not match, but they are bulk closed without investigation. This results in inaccurate data being input into the historic estimate process; and could result in invalid switch readings if an ICP switched out on an affected read.

8. HHR ICP missing and ICP days

As AMI ICPs move from NHH to HHR settlement, there is an increased volume of ICP missing differences due to timing, which makes it difficult to monitor the ICP missing report. Contact identifies ICPs with submission type and ICP days discrepancies, but sometimes the cause of the discrepancy was not correctly identified which led to some settlement unit errors not being corrected and issues remaining for later revisions. Due to workloads there were also sometimes delays in processing corrections required to resolve ICP missing issues. Further training has been provided and process improvements are being made.

9. NSP volumes validation

Validation checks for generation submission have decreased over time, and there was a breach during the audit period relating to under submission of generation data. Safeguards have been put in place to prevent recurrence, and extra validations to check the submission data is reasonable and consistent with the generation team's expectations prior to submission would be beneficial.

CTCS and CTCX

CTCS and CTCX have procedures in place to ensure compliance, but the manual nature of some of these processes, workloads, and competing priorities have meant that the processes have not always been followed as intended (e.g. completing spot checks instead of full validation) or completed on time (e.g. generation of HHR temporary estimates for the June 2020 initial submission, or setting up ICPs in time for the initial submission). This resulted in some significant differences between initial submissions for NHH volumes, HHR volumes, and ICP days as further validation was completed for later revisions and issues were resolved.

The audit fell at a difficult time, with CTCS just receiving the first major tranche of customers. Some issues beyond Simply Energy's control impacted on their ability to complete all their processes on time, like a generation ICP being switched in error, and ICPs being switched in on an unexpected date. I believe that if the team were under less pressure, more of the processes would have been completed, but with the increase in customer numbers it still would have been challenging.

Simply Energy is aware of these issues and intends to automate processes to allow them to be completed more efficiently; but finding the time to do this may be difficult with current workloads.

Conclusion

The audit found 48 non-compliance issues and 20 recommendations are made.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of 101, which results in an indicative audit frequency of three months.

For 44 of the 48 non-compliances, controls were assessed to be moderate or strong. Two of the non-compliances with weak controls related to meter reading attainment, one to rounding of volume data prior to preparation of submissions, and one to correcting information as soon as practicable. Two of the 48 non-compliances were assessed to have a high impact, and related to submission of distributed unmetered load and NSP volume submissions. Contact is continuing work to resolve distributed generation processes, and the NSP volume information has been corrected through the revision process and improved controls have been implemented.

Contact's audit responses indicate that they accept the non-compliances and recommendations. By time this report was finalised, Contact had already improved some processes to prevent recurrence, and further system and process changes were investigated or tested. Some of the non-compliances were caused by the initial migration of ICPs to CTCS and the associated increase in workloads. Lessons learned from the initial migration are expected to help improve compliance for any future transfers between CTCT and CTCS.

I recommend that the next audit is completed in a minimum of nine months.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Participants to give access	1.11	16A.4	CTCS and CTCX Information not provided within 15 business days of the request.	Moderate	Low	2	Identified
Relevant information	2.1	10.6, 11.2, 15.2	CTCT, CTCS and CTCX Some inaccurate data is recorded and was not updated as soon as practicable.	Weak	Low	3	Identified
Data Transmission	2.3	20 Schedule 15.2	CTCS June 2020 volume data for ICP 0000018218HRB13 was provided by email.	Strong	Low	1	Identified
Audit Trails	2.4	21 Schedule 15.2	CTCS and CTCX SalesForce user IDs are shared, and the audit trails do not record the individual user who made the change.	Strong	Low	1	Identified
Electrical connection of a point of connection	2.11	10.33A	CTCT 18 ICPs' meters were not recertified on unbridging. 209 ICPs reconnected without having metering certified within 5 business days. Six HHR new connections not certified within five days.	Moderate	Low	2	Identified
Changes to Registry	3.3	10 Schedule 11.1	CTCT Registry information not provided within 5 business days of change.	Moderate	Low	2	Identified
Trader responsibility for an ICP	3.4	11.18	CTCT Three incorrect MEP nominations (ICPs 0000326268TPB75, 0000234047MPE57 and 0000543111TU747) not actioned to ensure that an MEP is recorded on the registry.	Moderate	Low	2	Identified
Provision of information to the registry	3.5	9 Schedule 11.1	CTCT 1,083 late changes to Active. Contact was not recorded as the responsible participant in the registry on the active date for 1,083 ICPs. 328 late ANZSIC code updates. Incorrect active dates for some ICPs due to processing errors.	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	CTCT, CTCS & CTCX Some incorrect ANZSIC codes.	Moderate	Low	2	Identified
Changes to unmetered load	3.7	9(1)(f) of Schedule 11.1	CTCT Daily unmetered kWh values are incorrect for 37 ICPs on the registry and five ICPs with the incorrect unmetered load description recorded.	Moderate	Low	2	Identified
Management of Active	3.8	17 Schedule 11.1	CTCT Some incorrect Active dates.	Moderate	Low	2	Identified
Management of Inactive	3.9	19 of schedule 11.1	CTCT ICP 0000366150MP46C0 incorrectly recorded as disconnected on the registry but is active.	Strong	Low	1	Identified
Losing trader response to switch request	4.2	3(a)(ii) of schedule 11.3	CTCT “MU” AN code incorrectly being sent when metering is not loaded at the time of the AN being sent.	Moderate	Low	2	Identified
Losing trader must provide final information	4.3	5 Schedule 11.3	CTCT One late CS file. The average daily consumption calculation was not calculated from the validated read to read period until March 2020. Some incorrect last read dates provided. One instance of the an actual read for the event date sent as an estimate read. CTCS The average daily consumption calculation was not calculated from the validated read to read period.	Moderate	Low	2	Identified
Retailers must use the same reading	4.4	6(1) and 6A Schedule 11.3	CTCT 45 late RR files.	Strong	Low	1	Identified
NHH switch event meter reading	4.5	6(2) and (3) Schedule 11.3	CTCT 2 RR requests incorrectly rejected resulting in the gaining trader submitting 3,063 kWh more than their gain reads.	Moderate	Low	2	Identified
Gaining trader informs registry of switch request	4.7	9 of Schedule 11.3	CTCS Incorrect switch type used for 3 DUMML ICPs switching in.	Strong	Low	1	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Losing trader provides information	4.8	10(1) of Schedule 11.3	CTCT A small number of late CS files sent. CTCS No AN sent for one ICP.	Moderate	Low	2	Identified
Losing trader must provide final information	4.10	11 Schedule 11.3	CTCT The average daily consumption calculation was not calculated from the read to read period until March 2020. Incorrect last read date provided for at least one ICP. CTCS The average daily consumption calculation was not calculated from the validated read to read period.	Moderate	Low	2	Identified
Gaining trader changes to switch meter reading	4.11	12 of Schedule 11.3	CTCT 99 late RR files.	Strong	Low	1	Identified
Losing trader provision of information	4.13	15 of Schedule 11.3	CTCT "CO" AN code sent incorrectly.	Moderate	Low	2	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	CTCT Six switch withdrawals not resolved within ten business days of the withdrawal being initiated. At least one incorrect NW code sent.	Strong	Low	1	Identified
Metering information	4.16	21 Schedule 11.3	CTCT One CS file did not reflect the actual reading or best estimate of an actual reading on the event date.	Strong	Low	1	Investigating
Maintaining shared unmetered load	5.1	11.14	CTCT One ICP with missing shared unmetered load due the BTS supply being removed.	Strong	Low	1	Cleared
Unmetered threshold	5.2	10.14 (2)(b)	CTCT One standard unmetered ICP has an estimated annual consumption over 6,000 kWh per annum.	Strong	Low	1	Investigating
Unmetered threshold exceeded	5.3	10.14 (5)	CTCT One standard unmetered ICP has estimated annual consumption over 6,000 kWh per annum and has not been resolved within 20 business days.	Strong	Low	1	Investigating
Distributed unmetered load	5.4	11 of schedule 15.3	CTCT The monthly database extracts used to derive submission from are provided as	Moderate	High	6	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			<p>a snapshot and do not track changes at a daily basis as required by the code.</p> <p>Inaccurate submission information for several databases.</p> <p>Four streetlight audits not submitted by the due date.</p>				
Electricity conveyed & notification by embedded generators	6.1	10.13	<p>CTCT</p> <p>While meters were bridged, energy was not metered and quantified according to the code for 164 ICPs.</p>	Moderate	Low	2	Identified
Reporting of defective metering installations	6.4	10.43(2) and (3)	<p>CTCT</p> <p>The MEP was not advised of six bridged meters.</p>	Moderate	Low	2	Identified
NHH meter reading application	6.7	6 Schedule 15.2	<p>CTCT</p> <p>Incorrect switch event meter reads sent.</p> <p>NHH meter readings not applied at 2400 on the day of the meter reading for NHH to HHR upgrades and downgrades.</p> <p>Where a reading is not received for all registers on the meter read order date SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. This resulted in readings for two registers for ICP 0000017802EAAC8 being recorded with incorrect read dates.</p> <p>CTCS</p> <p>Simply Energy supplied NHH end readings to EMS for ICP 0000022997EA768, which did not correspond to the end of the last NHH day for the ICP.</p>	Moderate	Low	2	Identified
Interrogate meters once	6.8	7(1) and (2) Schedule 15.	<p>CTCT</p> <p>For at least ten ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p>	Weak	Low	3	Identified
NHH meters interrogated annually	6.9	8(1) and (2) Schedule 15.2	<p>CTCT</p> <p>For at least seven ICPs supplied for over 12 months, exceptional circumstances did not exist, and the best endeavours requirements were not met.</p>	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			There are some meter read frequency report accuracy issues.				
NHH meters 90% read rate	6.10	8(1) and (2) Schedule 15.2	CTCT For at least eight ICPs supplied for over four months, exceptional circumstances did not exist, and the best endeavours requirements were not met.	Weak	Low	3	Identified
Identification of readings	9.1	3(3) Schedule 15.2	CTCT Where a reading is not received for all registers on the meter read order date SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. This resulted in readings for two registers for ICP 0000017802EAAC8 being recorded with incorrect read dates and types. One incorrect actual read labelled as an estimate in a CS file. CTCS Simply Energy supplied NHH end readings to EMS for ICP 0000022997EA768, which did not correspond to the end of the last NHH day for the ICP.	Moderate	Low	2	Investigating
Meter data used to derive volume information	9.3	3(5) of schedule 15.2	CTCS and CTCX EDMI provides HHR interval data for some ICPs rounded to two decimal places. NHH raw meter data received from all MEPS and agents except FCLM and WASN is rounded upon receipt into Datahub and not when volume information is created if it is provided with decimal places. Customer readings are not consistently entered into Datahub with decimal places where this information is provided by the customer. Any NHH data recorded with decimal places in Datahub is rounded to the nearest whole number when exported to EMS' MADRAS for reconciliation.	Weak	Low	3	Identified
Half hour estimates	9.4	3(5) of schedule 15.2	CTCS and CTCX HHR estimates were not consistently created where HHR trading period data	Moderate	Medium	4	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			<p>was missing. Estimates were created for revision submissions.</p> <p>CTCS</p> <p>Some HHR volumes estimates for CTCS did not meet the reasonable endeavours requirements for June 2020. The estimated data was replaced by revision 1.</p>				
Calculation of ICP days	11.2	15.6	<p>CTCT</p> <p>ICP days were not reported correctly where settlement unit information was incorrect in SAP, or a system defect resulted in an incorrect submission type being applied. Contact has been working to resolve these issues before revision 14, and the ICP days differences are generally small.</p> <p>CTCX</p> <p>EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.</p> <p>CTCS</p> <p>HHR ICP days were not reported correctly where temporary estimates were not inserted for ICPs with missing days of data up to June 2020 revision 1.</p> <p>NHH ICP days were not reported correctly because some ICPs were not set up in MADRAS, data issues prevented ICPs being sent to MADRAS, and/or incorrect start dates were applied. The issues were resolved through the revision process.</p>	Moderate	Low	2	Identified
Electricity supplied information provision to the reconciliation manager	11.3	15.7	<p>CTCT</p> <p>Alleged breach 2005CTCT1 recorded that CTCT submitted volume for a GD NSP (BDE0111-SOLE) in their AV-120 202004 initial submissions on BD4.</p> <p>CTCX</p> <p>The Mar-20 to Jun-20 billed volumes are inconsistent with the Mar-20 to Jun-20 submission volumes.</p>	Moderate	Low	2	Identified
HHR aggregates information provision to	11.4	15.8	<p>CTCT</p> <p>HHR aggregates file does not contain electricity supplied information.</p>	Moderate	Medium	4	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
the reconciliation manager			<p>Some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data. Revised data will be provided through the revision process.</p> <p>CTCX</p> <p>HHR aggregates file does not contain electricity supplied information.</p> <p>EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.</p> <p>One ICP was missing from the May 2020 initial submission because of a Datahub profile discrepancy, which was corrected prior to revision 1.</p> <p>CTCS</p> <p>HHR aggregates file does not contain electricity supplied information.</p> <p>HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing. Revised data will be provided through the revision process.</p>				
Creation of submission information	12.2	15.4	<p>CTCT</p> <p>Some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data.</p> <p>CTCX</p> <p>ICP 0158947339LC9D1 was missing from some HHR revision submissions.</p> <p>CTCS</p> <p>CTCS HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing.</p> <p>Some ICPs were not created in MADRAS in time for inclusion in the June 2020 initial submission.</p>	Moderate	Medium	4	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Grid connected generation	12.6	15.11	CTCT Alleged breach 2004CTCT1 recorded that CTCT submitted some incorrect NSP volumes information to the RM for the March 2020 initial allocation.	Moderate	High	6	Identified
Accuracy of submission information	12.7	15.12	CTCT, CTCX and CTCS Some submission data was inaccurate and was not corrected at the next available opportunity.	Moderate	Medium	4	Identified
Permanence of meter readings for reconciliation	12.8	4 Schedule 15.2	CTCT Some estimates were not replaced by revision 14.	Moderate	Medium	4	Identified
Historical estimates and forward estimates	12.10	3 Schedule 15.3	CTCS and CTCX Where SASV profiles are not available, consumption based on validated readings is labelled as forward estimate.	Moderate	Low	2	Identified
Forward estimate process	12.12	6 Schedule 15.3	CTCT Inaccurate FE caused the thresholds not to be met in some instances.	Strong	Low	1	Identified
Historical estimate reporting to RM	13.3	10 of Schedule 15.3	CTCT Historic estimate thresholds were not met for some revisions.	Strong	Low	1	Identified
Future Risk Rating					101		
Indicative Audit Frequency					3 months		

Future risk rating	0	1-3	4-14	16-40	41-55	55+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Response
Trader responsibility for an ICP	3.4	CTCT Review MEP naming protocols in ORBS to align with MEPs.	Contact is reviewing the MEP nomination rejection process in SAP system. We are actively working with field contractors to ensure correct MEP is recoded on the field paperwork.
Provision of information to the registry	3..5	CTCT Review unmetered new connection process.	Contact is reviewing the unmetered new connection process. We are actively working with Distributors as well as with our contractors to resolve any issues and paperwork delays.
ICPs at new or ready status for greater than 24 months	3.10	CTCT Review the process in place to confirm ICPs where Contact is the nominated trader are still required after 24 months.	Any requests received from Distributors are considered and responses/acknowledgements are returned to them accordingly. In some instances, customer confirmation is required prior to providing the approval to decommission the ICP which can cause a delay. Contact will consider the recommendations made by auditors to improve this process.
AN response code hierarchy	4.2	CTCS/ CTCX Consider adding the MU (unmetered supply) and OC (occupied premises) codes to the AN code hierarchy to ensure that AA (accept and acknowledge) is only used when no other codes are applicable.	The change to incorporate MU (unmetered supply) has been developed and will be tested and deployed by 11 September 2020.
CS estimated daily kWh	4.3	CTCS/ CTCX Consider reviewing the estimated daily consumption calculation to ensure compliance with the registry functional specification.	A new process has been developed and tested and is now ready for deployment. From 3 September 2020 we will be compliant.
Electricity conveyed & notification by embedded generators	6.1	CTCT Check the Distributor's indicated fuel type for all distributed generating ICPs. Confirm the fuel types for the following ICPs so that the correct generation profile can be determined: 0011006802PCDFA (PV1/wind) 0000029336HRC55 (PV1/other) 0000950408LNEF9 (PV1/other) 0005070279RNF1D (PV1/other) 0005441773RN1BA (PV1/other) 0006204224TUB94 (PV1/other)	Contact will engage with the relevant distributors to encourage them to populate the registry with more accurate fuel type information for these ICPs plus any additional ICPs that are flagged as having some form of generation installed in the future

Subject	Section	Recommendation	Response
		0007138276RNF48 (PV1/other) 0007160293RN6C9 (PV1/other) 0008813385ML931 (PV1/other) 0080280200WR39C (PV1/other).	
Meter condition information	6.6	CTCS /CTCX Ensure that meter condition information is received from MRS and reviewed to identify any events which could affect the accuracy of metering information. Review all meter condition information provided by Wells to identify any meter events which could affect accuracy.	Simply Energy will work with Contact on how we obtain a copy of the MRS report. Monthly reports from Wells are monitored for any inaccuracies.
Meter read frequency reporting	6.9	CTCS/ CTCX Ensure that only ICPs supplied at the end of the period being reported are included in the meter read frequency reporting.	The incorrect reporting of ICPs in the NHH Read Reports has been resolved.
HHR estimation process	9.4	CTCS and CTCX Take HHR midnight readings into account (if available) when calculating HHR estimates.	HHR midnight readings are taken into consideration on all received AMI data. We are currently investigating the issue that the auditor raised around actuals not replacing estimates.
HHR estimation timeliness	9.4	CTCS and CTCX Complete the HHR estimation process prior to business day 4, to ensure that estimates are included in submission data.	Process has been updated to run now on the end of day Business Day 3.
HHR estimation for new ICPs	9.4	CTCS and CTCX Improve the HHR estimation process so that Datahub can apply estimates where data for an equivalent day is not available.	A ticket has been raised with our Service Provider to investigate and resolve this issue.
Replacement of estimates with actual data	9.4	CTCS and CTCX If actual data is received for periods which have been estimated, ensure that the estimates are replaced with the actual data.	This is currently under investigation with our Service Provider to investigate and resolve.
Replacement of actual data with actual data	9.4	CTCS and CTCX If partial replacement data is provided, ensure that only the periods with valid replacement data are updated in Datahub.	We are revisiting this issue with both FCLM and our Service Provider.
NHH metering information data validation	9.5	CTCS and CTCX Review the validation process for reads that fail validation because	This is currently being investigated by our Service Provider and we are looking at a resolution by 30 September 2020.

Subject	Section	Recommendation	Response
		<p>they are lower than previous estimates.</p> <p>In these situations, if the actual readings are confirmed to be accurate, they should be applied.</p> <p>Where revision 14 has already been issued, the permanent estimate process should be used to ensure that all consumption is captured.</p>	
Generation data validation	9.6	<p>CTCT</p> <p>I recommend strengthening generation data checks, to ensure that generation data is accurate.</p>	Contact has strengthened our validation and verification checks around generation data to ensure this issue does not reoccur
HHR validation of consumption patterns	9.6	<p>CTCS/CTCX</p> <p>Validation of HHR consumption patterns should be completed at ICP level as well as aggregate level.</p>	A change on process will allow this to occur on BD3 of September.
HHR data validation timeliness	9.6	<p>CTCS/ CTCX</p> <p>Complete full HHR validation prior to each submission.</p>	A change in process and other raised enhancements will allow this to occur by 31 October 2020.
AV080 zeroing process	12.3	<p>CTCS/ CTCX</p> <p>The zeroing process is currently completed for the AV110 but also needs to be completed for the AV080 to ensure future compliance.</p> <p>Identify instances where an AV080 aggregation line has been reported in a previous revision, but not the current revision and add a zero line.</p>	Processes have been updated to check for previous submissions in the AV080.

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

The Electricity Authority's website was reviewed to identify any exemptions relevant to the scope of this audit.

Audit commentary

There are four exemptions currently in place relevant to the scope of this audit:

Exemption No. 177: Exemption to clause 8(g) of schedule 15.3 of the Electricity Industry Participation Code 2010 in respect of providing half-hour ("HHR") submission information instead of non half-hour ("NHH") submission information for distributed unmetered load ("DUML"). This exemption expires at the close of 31 October 2023.

Exemption No. 185: Exemption to clause 11 of schedule 15.3 of the Electricity Industry Participation Code 2010 in respect of creating DUML databases for the following ICPs. This exemption expires on the date on which Contact no longer has responsibility as the trader for these ICPs on the registry, and still applies for ICP 0001183605HB0B0.

ICP identifier	Comments
0001183605HB0B0	Contact still has responsibility for this ICP, under verandah lights with load of 3.7 kWh per day are connected.
0000038627NTADB	Decommissioned 17/05/17
0000557925UND32	Switched out 28/02/14
0000600085HBD8B	Switched out 23/01/13
0000916610TEA3F	Switched out 01/12/16
0005000772HBA61	Switched out 28/08/14
0008801012TP900	Unmetered load details have been removed on the registry effective 23/06/14
0014189134HBC96	Switched out 03/11/15
0016096032EL6DD	Switched out 16/07/16
0018137292HB7F1	Decommissioned 05/02/13
0046054751HBF7	Switched out 08/11/12

Exemption No. 191: Exemption to clause 10.24(c) of the Electricity Industry Participation Code 2010 to allow subtraction to determine submission information for ICP 0000032431HR99C. This exemption expires on the earlier of:

- the close of 31 December 2023, or
- the completion date of a major upgrade to the Ohaaki substation.

The major upgrade has not occurred; therefore, this exemption is still valid.

Exemption No. 203: Exemption to clause 10.24(c) of the Electricity Industry Participation Code 2010 to allow subtraction to determine submission information for ICP 0000880392WEA92. This exemption expires on the earlier of:

- the close of 31 December 2022, or
- the completion date of a major upgrade to the switchboards at Contact's co-generation plant at the Te Rapa dairy factory.

The major upgrade has not occurred; therefore, this exemption is still valid.

Exemption No. 275: Exemption to clause 10.24(c) of the Electricity Industry Participation Code 2010 to allow subtraction to determine submission information for ICP 0008803342WEFC3. This exemption expires on the earlier of:

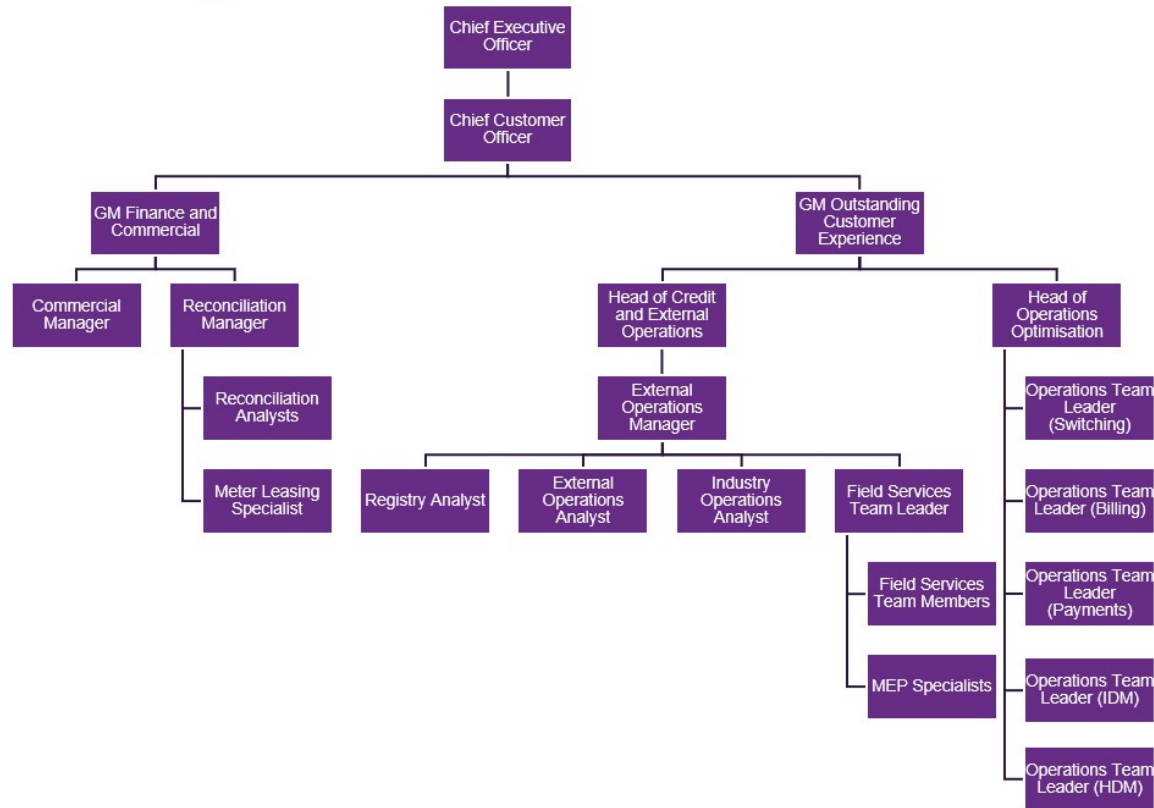
- the close of 31 December 2020,
- the date when Contact is no longer recorded in the registry as being the trader,
- the date when AMS is no longer recorded in the registry as being the MEP, or
- replacement of the existing 11kV line that feeds ICP 00008803342WEFC3 with a corresponding low voltage line.

The exemption expired when ICP 0008803342WEFC3 was decommissioned effective from 01/11/2019.

1.2. Structure of Organisation

Contact Energy provided a copy of their organisational structure.

Contact Organisational Diagram



1.3. Persons involved in this audit

Auditors:

Name	Company	Role
Tara Gannon	Veritek Limited	Lead Auditor
Rebecca Elliot	Veritek Limited	Supporting Auditor

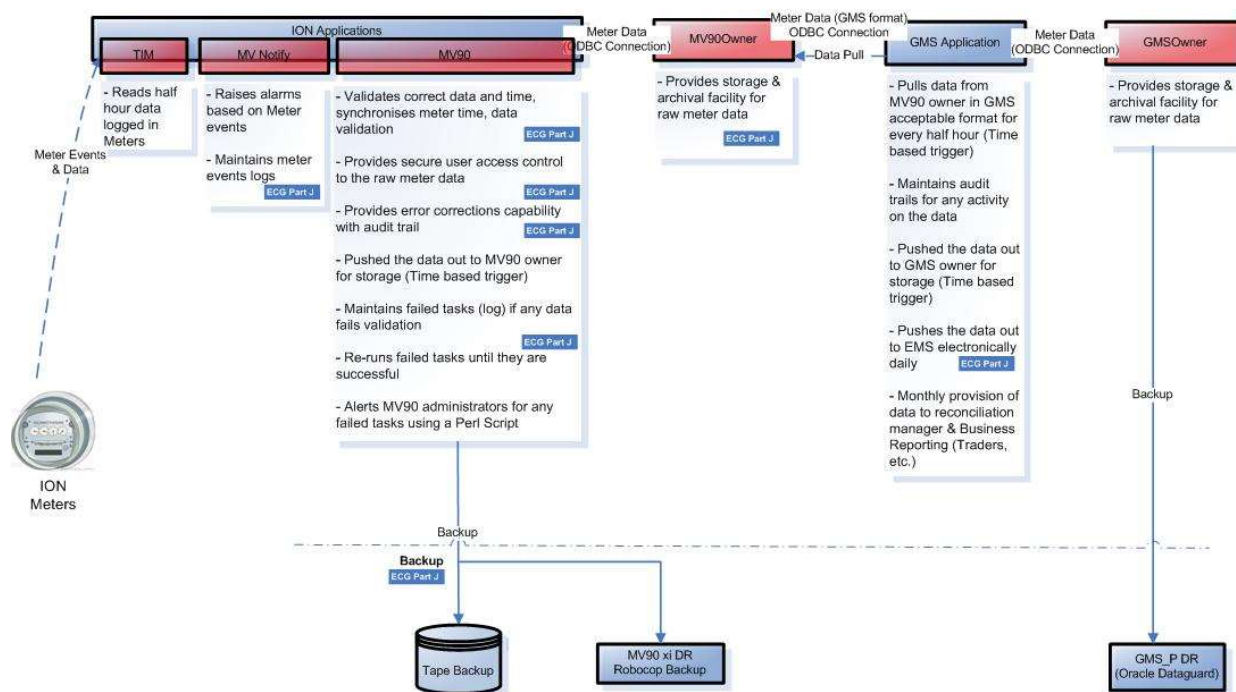
Contact personnel assisting in this audit were:

Name	Title
Aaron Wall	Operations Team Leader (HDM)
Adam Ward	Operations Team Leader (Billing)
Allie Jones	External Operations Analyst
Ashley Teh	Operations Team Member
Bernie Cross	Reconciliation Manager
Chris Golder	Operations Team Member
Darren Law	Field Services Team Leader
Debby Abrahams	Commercial Manager
George Fleming	Collections and Assurance Team Member
James Buckley	Reconciliation Analyst
Joanne Benvenuti	Operations Team Member
Kirstyn Harding	Operations Team Member
KP Chiew	Senior Reconciliation Analyst
Nagham Anayi	MEP Specialist
Rajdeep Kaur	Registry and Reconciliation Analyst
Roy Burne	Operations Team Member
Simon Makrogianni	Operations Team Member

SAP is cloud based and can continue to operate in the event of the failure of any single data centre. Backups occur according to the following schedule:

Backup	SAP System	Full Backup	Differential Backup	Transaction Log backup
SAP Database Backups	ECC	Weekly (Sunday)	Daily	Every 30 minutes
	CRM			
	Gateway			
	Portal			
	PO			

The diagram below shows an overview of data flow, validation, storage and backup arrangements for generation.



Simply Energy (CTCT and CTCS)

Meter reading and volume data is imported into AXOS Datahub, which is used to validate the volumes and produce HHR submissions. Validated readings are transferred to the AXOS billing engine for billing and as billed reporting, and to Emersion to produce invoices for customers supplied under the CTCS participant code.

SalesForce is used for the management of ICP and customer information.

Backup is cloud based, and password protection is in place to prevent unauthorised access to data.

Agents

Agent systems are discussed in their own audit reports.

1.6. Breaches or Breach Allegations

There have been two breach allegations relevant to the scope of this audit during the audit period.

Reference	Date	Clause	Summary	Status	Result
2004CTCT1	26/05/20	Part 15 clause 15.2A	CTCT submitted incorrect NSP volumes data to the RM on BD 4 for the March 2020 consumption period.	Fact finding	No result yet
2005CTCT1	27/05/20	Part 15 clause 15.2A	CTCT submitted volume for a GD NSP (BDE0111-SOLE) in their AV-120 202004 initial submissions on BD4.	Fact finding	No result yet

1.7. ICP Data

CTCT

All active ICPs are summarised by metering category in the table below. 435 of the 605 active ICPs with a metering category of 9 or blank have trader unmetered load details recorded. The remaining 170 ICPs are active but have no metering details entered on the registry and are discussed in **section 2.9**.

Metering Category	(2020)	(2019)	(2018)	(2017)	(2016)
1	407310	408039	413,110	417,819	419,055
2	3956	4774	5,136	5,201	5,460
3	530	816	857	942	990
4	205	322	337	383	388
5	22	35	41	52	49
9	112	152	198	250	273
Blank	329	453	645	676	1,042

Status	Number of ICPs (2020)	Number of ICPs (2019)	Number of ICPs (2018)	Number of ICPs (2017)	Number of ICPs (2016)
Active (2,0)	412,464	414,591	420,324	425,323	427,257
Inactive – new connection in progress (1,12)	-	2	2	-	-
Inactive – electrically disconnected vacant property (1,4)	6,954	7,313	7,734	8,135	8,564

Inactive – electrically disconnected remotely by AMI meter (1,7)	2,330	2,208	1,778	1,678	1,283
Inactive – electrically disconnected at pole fuse (1,8)	62	62	26	103	2
Inactive – electrically disconnected due to meter disconnected (1,9)	81	73	11	1	1
Inactive – electrically disconnected at meter box fuse (1,10)	35	24	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	970	1,104	1,354	1,951	2,876
Inactive – reconciled elsewhere (1,5)	3	3	5	2	4
Decommissioned (3)	51,096	49,518	47,987	45,670	42,970

CTCX

All active ICPs are summarised by metering category in the table below. The two active ICPs with a blank metering category are residual load ICPs with an SB reconciliation type.

Metering Category	(2020)
1	28
2	23
3	2
4	-
5	-
9	-
Blank	2

Status	Number of ICPs (2020)
Active (2,0)	55
Inactive – new connection in progress (1,12)	-
Inactive – electrically disconnected vacant property (1,4)	-

Inactive – electrically disconnected remotely by AMI meter (1,7)	-
Inactive – electrically disconnected at pole fuse (1,8)	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-
Inactive – electrically disconnected at meter box fuse (1,10)	-
Inactive – electrically disconnected at meter box switch (1,11)	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-
Inactive – reconciled elsewhere (1,5)	-
Decommissioned (3)	-

CTCS

All active ICPs are summarised by metering category in the table below. The active ICPs with a metering category of nine all have unmetered load recorded.

Metering Category	(2020)
1	41
2	24
3	38
4	7
5	-
9	3
Blank	-

Status	Number of ICPs (2020)
Active (2,0)	113
Inactive – new connection in progress (1,12)	-

Inactive – electrically disconnected vacant property (1,4)	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	-
Inactive – electrically disconnected at pole fuse (1,8)	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-
Inactive – electrically disconnected at meter box fuse (1,10)	-
Inactive – electrically disconnected at meter box switch (1,11)	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-
Inactive – reconciled elsewhere (1,5)	-
Decommissioned (3)	-

1.8. Authorisation Received

Contact provided a letter of authorisation.

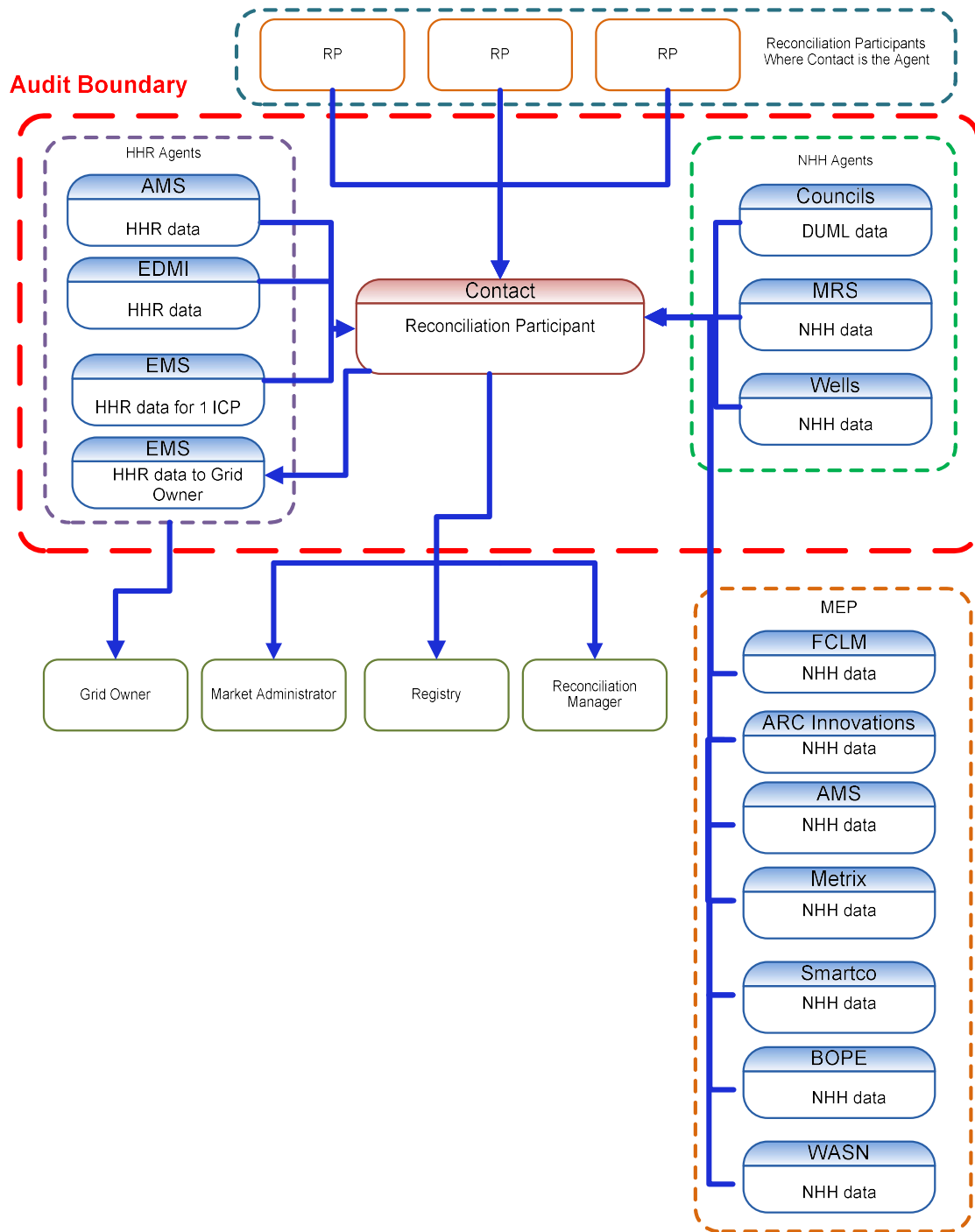
1.9. Scope of Audit

This Electricity Industry Participation Code Reconciliation Participant audit was performed at the request of Contact, 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 V7.2

The audit was carried out remotely using Microsoft Teams and at Simply Energy's office in Wellington between 19/06/2020 and 22/07/2020.

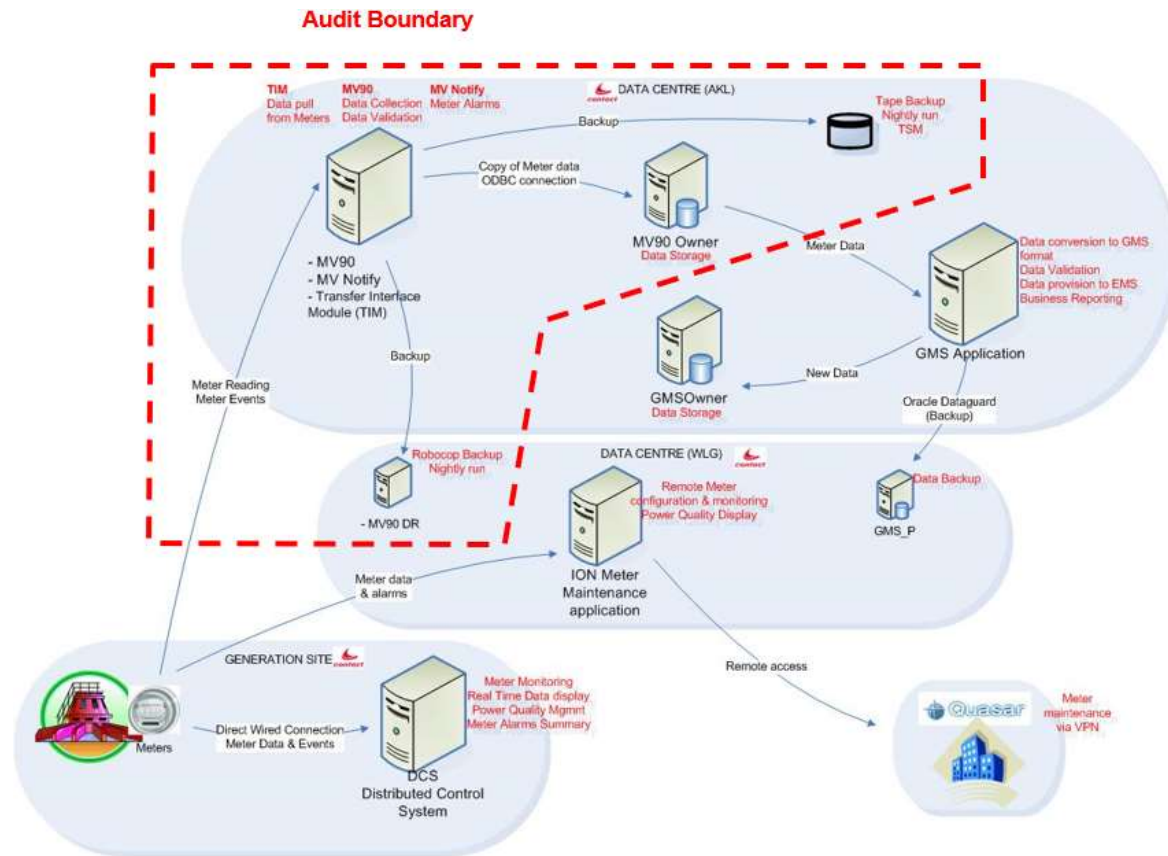
CTCT

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



Contact acts as an agent to other Reconciliation Participants who have responsibility for embedded network “gate” ICPs. It is intended that these parties will use Contact’s audit report to support their application for certification.

The diagram below is specific to Contact’s HHR data collection activities for generation metering, and it shows the audit boundary for this area.



The table below shows the tasks under clause 15.38 of part 15, for which Contact requires certification. This table also lists those agents who assist with these tasks:

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing Data to Contact
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) – Gathering and storing raw meter data	Datacol – NHH (until early 2020) MRS – NHH AMS – HHR EDM I – HHR EMS – HHR	AMS (incl Smartco) ARC Innovations FCLM Legacy Metering Group IntelliHUB Ltd (incl Metrix and Counties Power)
(c)(iii) - Creation and management of volume information	AMS – HHR EDM I – HHR EMS – HHR	

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs Providing Data to Contact
(d)(i)– Calculation of ICP days		
(d)(ii) - delivery of electricity supplied information under clause 15.7		
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8		
(e) – Provision of submission information for reconciliation		
(f) - Provision of metering information to the Grid Owner	EMS	

CTCX

CTCX customers are supplied by the Simply Energy brand, and are billed as HHR but may be settled as NHH if their metering does not meet HHR certification requirements.

- Simply Energy acts as an agent for switching, registry and submission processes.
- Up to 31/05/20 EMS collected and validated HHR data, and created HHR submissions for CTCX. From 01/06/20, EDMl and AMS began supplying HHR data directly to Simply Energy, and Simply Energy has validated the data and created HHR submissions.
- EMS creates NHH submission information for CTCX as an agent.
- Wells provides readings for any manually read NHH ICPs, and MEPs provide AMI data.

The table below shows the tasks under clause 15.38 of part 15, for which Contact requires certification for its CTCX code. This table also lists those agents who assist with these tasks:

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs
(a) - Maintaining registry information and performing customer and embedded generator switching	Simply Energy	
(b) - Gathering and storing raw meter data	Wells – NHH EMS – HHR (up to 31/05/20) AMS – HHR (from 01/06/20) EDMI – HHR (from 01/06/20)	AMS (incl Smartco) ARC Innovations FCLM Legacy Metering Group IntelliHUB Ltd (incl Metrix and Counties Power)

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs
(c)(i) - Creation and management of HHR volume information	EMS (up to 31/05/20) Simply Energy (from 01/06/20)	
(c)(ii) - Creation and management of NHH volume information	EMS	
(d)(i) - Calculation of ICP days	EMS – NHH EMS – HHR (up to 31/05/20) Simply Energy – HHR (from 01/06/20)	
(d)(ii) - delivery of electricity supplied information under clause 15.7	Simply Energy	
(d)(iii) - delivery of information from retailer and direct purchaser half hourly metered ICPs under clause 15.8		
(e) - Provision of submission information for reconciliation	EMS – NHH EMS – HHR (up to 31/05/20) Simply Energy – HHR (from 01/06/20)	

CTCS

CTCS customers are supplied by the Contact Energy brand and may be billed and settled as HHR, NHH or DUML.

- Simply Energy acts as an agent for switching, registry, and submission processes.
- Up to 31/05/20 EMS collected and validated HHR data and created any permanent estimates and corrections required, and supplied the validated HHR data including estimates and corrections to Simply Energy in EIEP3 format. Simply Energy loaded these validated volumes into Datahub to produce reconciliation submissions. From 01/06/20, EDM and AMS began supplying HHR data directly to Simply Energy, and Simply Energy has validated the data and created submissions for CTCS.
- EMS creates NHH submission information for CTCS as an agent, including DUML submissions.
- MRS provides readings for any manually read NHH ICPs, and MEPs provide AMI data.

The table below shows the tasks under clause 15.38 of part 15 for which Simply Energy requires certification.

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Agents Involved in Performance of Tasks	MEPs
(a) - Maintaining registry information and performing customer and embedded generator switching	Simply Energy	
(b) – Gathering and storing raw meter data	MRS – NHH EMS – HHR (up to 31/05/20) AMS – HHR (from 01/06/20) EDMI – HHR (from 01/06/20)	AMS Arc Innovations (Arc) Counties Power Intellihub Legacy Metering Group Smartco The Lines Company (FCLM)
(c)(i) - Creation and management of HHR volume information	EMS (up to 31/05/20) Simply Energy	
(c)(ii) - Creation and management of NHH volume information	EMS	
(d)(i) - Calculation of ICP days & delivery of a report under clause 15.6	Simply Energy - HHR EMS - NHH	
(d)(ii) - delivery of electricity supplied information under clause 15.7	Simply Energy	
(e) - Provision of submission information for reconciliation	Simply Energy - HHR EMS - NHH	

Agents

Contact receives DUMML data from a number of Councils, who are considered agents under clause 15.34 of part 15. These databases are now audited separately. A summation of these audits is detailed in **section 5.4**.

The remaining agents listed above have been audited in accordance with the Guidelines for Reconciliation Participant Audits V7.2. Their audit reports are expected to be submitted with this audit. EMS' NHH processes are not included in their agent audit, and were reviewed as part of this audit. The MRS and EDMl audits were completed more than seven months prior to this audit, and the agents confirmed that there have been no changes to their processes which could have a negative impact on Contact Energy's compliance. Comments are included in this report in relation to any issues found.

1.10. Summary of previous audit

CTCT

Contact provided a copy of their previous reconciliation participant audit report conducted in August 2019 by Rebecca Elliot (lead auditor) of Veritek Limited. The summary tables below show the statuses of the non-compliances and recommendations 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 of part 11	Some incorrect registry information.	Still existing
Audit trails	2.4	21 Schedule 15.2	EDMI's IE2 and DQM audit trails do not record the operator identifier for the person who completed the activity; operator identifiers correspond to a user group not an individual.	The EDM issue is resolved, but a new issue applies for CTCs and CTCX
Connection of an ICP	2.9	10.32	No arrangement in place with Intellihub.	Cleared
Metering certification	2.11	10.33A(2) of part 10	15 ICPs were not certified within five business days of becoming active. 74 ICPs were reconnected without having metering certification in place. 45 ICPs were not recertified on unbridging.	Still existing
Arrangements for metering equipment provision	2.13	10.36	No arrangement in place with Intellihub.	Cleared
Changes to registry	3.3	10 of schedule 11.1	Registry information not provided within 5 business days of change.	Still existing
MEP nomination	3.4	11.8 of part 11	One incorrect MEP nomination not actioned to ensure that an MEP is recorded on the registry.	Still existing
Provision of registry information	3.5	Clause 9 of schedule 11.1	231 late changes to Active. Contact was not recorded as the responsible participant in the registry on the active date for 231 ICPs.	Still existing

Subject	Section	Clause	Non-compliance	Status
ANZSIC codes	3.6	9(1)(k) of schedule 11.1	Some incorrect ANZSIC codes.	Still existing
Unmetered load	3.7	9(1)(f) of schedule 11.1	Daily unmetered kWh values are incorrect for 184 ICPs on the registry (2 ICPs where Distributor has load and Contact has none + 179 BTS supplies still incorrectly recorded +3 ICPs with the incorrect load when compared to the Distributor's load).	Still existing
Active status	3.8	17 of schedule 11.1	Some incorrect Active dates.	Still existing
Inactive status	3.9	19 of schedule 11.1	ICPs 0000632467TP11F, 0000132680TE1E4, 0005018218RN3F0, 0000922323TUB0B, 0000381890TP1F4, and 0000339665TP9AE incorrectly show inactive status on the registry for periods when they were electrically connected.	Still existing
Switching	4.2	3(a)(ii) of schedule 11.3	"MU" AN code incorrectly being sent.	Still existing
	4.3	5 of schedule 11.3	<p>Eight late CS files.</p> <p>The average daily consumption calculation is not calculated from the read to read period.</p> <p>Incorrect average daily consumption of zero when ICPs switch in and out in a short period.</p> <p>Incorrect average daily consumption recorded in the CS file for ICP 0000570809UN7D0.</p> <p>Incorrect last read dates where a meter has been removed and reinstalled.</p> <p>One instance of the incorrect switch event meter read sent as an estimate for an AMI site.</p>	Still existing
	4.4	6 of schedule 11.3	45 Late RR files.	Still existing

Subject	Section	Clause	Non-compliance	Status
	4.7	9 of Schedule 11.3	Incorrect switch type used for 2 DUML ICPs switching in.	Cleared for CTCT, non-compliance is recorded for CTCS
	4.10	11 Schedule 11.3	1 late CS file. The daily consumption calculation is not calculated from the read to read period. Incorrect daily consumption of zero when ICPs switch in and out in a short period. Incorrect last read dates for seven of ten examples checked. Two instances of the incorrect switch event meter read sent as an estimate for an AMI site.	Still existing
	4.11	12 of schedule 11.3	104 late RR files.	Still existing
	4.13	15 of Schedule 11.3	"CO" AN code sent incorrectly.	Still existing
	4.15	17 of schedule 11.3	124 Late NW files.	Still existing
Shared unmetered load	5.1	11.14 of part 11	One ICP with missing shared unmetered load due to a registry update failing.	Still existing
Unmetered thresholds	5.2	10.14(2)(b) of part 10	One standard unmetered ICP has an estimated annual consumption over 6,000 kWh per annum.	Still existing
	5.3	10.14(5) of part 10	One standard unmetered ICP has estimated annual consumption over 6,000 kWh per annum and has not been resolved within 20 business days.	Still existing

Subject	Section	Clause	Non-compliance	Status
Distributed unmetered load	5.4	11 of schedule 15.3	The monthly database extracts used to derive submission from are provided as a snapshot and do not track changes at a daily basis as required by the code. Inaccurate submission information for several databases.	Still existing
Electricity conveyed	6.1	10.13 of part 10	While meters were bridged, energy was not metered and quantified according to the code for 48 ICPs. ICPs 0000008616TE48C, 0000011195HREA1, 0000012341NT62C, 0000025072UN5D3, 0000036741HB1E7, and 0000038430HB33C have generation consumption submitted under the PV1 profile but only have RPS profile recorded on the registry. ICPs 0001186517MLCC3, 0002333286ALA6A, and 0004001818ALD5D only have PV1 profile recorded on the registry, but also have X flow registers.	Still existing
Responsibility for metering at GIP	6.2	10.13	Updated meter certification details were provided ten business days late for CYD2201CTCTG.	Cleared
Collection of information by certified reconciliation participant	6.5	2 Schedule 15.2	FCLM does not usually provide a screen shot confirming time differences for meters which are manually read using MV90. If this information is not provided, EDML is unable compare the system time to the meter time.	Cleared
NHH reading application	6.7	6 Schedule 15.2	Incorrect switch event meter reads sent. NHH meter readings not applied at 2400 on the day of the meter reading for NHH to HHR upgrades.	Still existing
Interrogate meters once	6.8	7(1) & (2) of schedule 15.2	For ten ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met.	Still existing

Subject	Section	Clause	Non-compliance	Status
Annual interrogation	6.9	8(1) & (2) of schedule 15.2	For two ICPs supplied for over 12 months, exceptional circumstances did not exist, and the best endeavours requirements were not met. Some report accuracy issues were identified, and Contact is developing a replacement report to resolve this.	Still existing
NHH meters 90% read rate	6.10	8(1) and (2) Schedule 15.2	For eight ICPs supplied for over four months, exceptional circumstances did not exist, and the best endeavours requirements were not met.	Still existing
NHH correction	8.1	19(1) Schedule 15.2	A correction for inactive consumption for ICP 0000246174TP7F1 was not processed correctly resulting in 3775 kWh of inactive consumption being excluded from submissions. The correction will be updated. ICP 0002361613TPE7A was bridged from 31/08/18 to 10/09/18, and a correction has not been processed yet, Contact intends to correct this ICP before revision 14.	Cleared
Electronic meter readings and estimated readings	9.6	17 Schedule 15.2	For EDM's manual downloads, the meter event information is not imported into IE2 and is not reviewed and sent to the retailer.	Cleared
Buying and selling notifications	11.1	15.3	Notifications are not provided where Contact began or ceased trading at an NSP using a profile other than HHR, RPS, UML, EG1, or PV1 for 30 combinations of NSP and profile. There is no facility to provide the profile when entering a trading notification on the reconciliation manager portal.	Cleared

Subject	Section	Clause	Non-compliance	Status
Calculation of ICP days	11.2	15.6	<p>AV110 data is not zeroed where Contact has previously submitted ICP days, but there are no ICP days reported in the current revision. Because no replacement data was submitted, the original ICP days remain in the reconciliation manager's database.</p> <p>ICP days were over reported at CAM0011 (June 2018), CGE0011 (July 2018), TKM0011 (August 2018), TPS0011 (July & August 2018), TWG0011 (June & July 2018) due to inactive settlement units not being created for some ICPs.</p>	<p>Cleared</p> <p>Still existing</p>
HHR aggregates file	11.4	15.8 of part 15	<p>HHR aggregates file does not contain electricity supplied information.</p> <p>Data for ten ICPs was incorrectly included in some wash up files, and data for three ICPs was incorrectly excluded from some wash up files. Corrections have now been processed or are due to be processed for the affected ICPs.</p>	<p>Still existing</p> <p>Cleared</p>
Accuracy of submission information	12.7	15.12 of part 15	<p>Some submission data was inaccurate, and was not corrected at the next available opportunity for submission for ICPs 0000442007UN246, 1001150655CK434, 0000470070HB2B2 and 0278411762CL033.</p> <p>Some ICP days submissions contained some inaccurate information.</p> <p>Some NHH volumes submissions contained some invalid forward estimates.</p>	Still existing
Permanence of meter readings	12.8	4 of schedule 15.2 and clause 15.2 of part 15	Some estimates not replaced at R14.	Still existing
Forward estimate accuracy	12.12	6 of Schedule 15.3	The accuracy threshold was not met for all months and revisions.	Still existing

Subject	Section	Clause	Non-compliance	Status
HE targets	13.3	10 of Schedule 15.3	HE targets were not met for some NSPs.	Still existing

Subject	Section	Clause	Recommendation	Status
Changes to unmetered load	3.7	9(1)(f) of schedule 11.1	Review reporting to ensure that discrepancies are identified.	Contact has implemented additional reporting to also ensure registry updates are generated and sent consistently
Management of active	3.8	17 of schedule 11.1	Liaise with WEL Network to progress the completion of the new connection for ICP 0000044423WE226.	Resolved. Contact has now claimed the ICP after GENE has reversed their claim and provided the paperwork.
Management of active	3.8	17 of schedule 11.1	Check new connections for first active date discrepancies against the initial electrical connection date.	Contact has recommenced the process to check the accuracy of first active dates against the initial electrical connection date and meter certification date which should reduce the number of these potential miss-matches in future.

CTCX material change audit

Contact provided a copy of their material change audit report for CTCX conducted in August 2019 by Tara Gannon of Veritek Limited. The summary tables below show the statuses of the non-compliance and recommendations raised in the previous audit. Further comment is made in the relevant sections of this report.

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.	Still existing

Subject	Section	Clause	Recommendation	Status
ICPs at new or ready status for 24 months	3.10	15 Schedule 11.1	I recommend Simply Energy run a registry list six monthly with: Status: 000 or 999 Proposed trader: CTCX End date: the day the report is run and compare the results to the ICPs Simply Energy expects to be at “new” or “ready” status. Any ICPs which appear to have been assigned in error can then be checked with the distributor.	Cleared, no ICPs have been supplied for more than 24 months
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	Consider adding the MU (unmetered supply) and OC (occupied premises) codes to the AN code hierarchy to ensure that AA (accept and acknowledge) is only used when no other codes are applicable.	Still being considered
Losing trader must provide final information - standard switch	4.3	5 of schedule 11.3	Consider reviewing the estimated daily consumption calculation to ensure compliance with the registry functional specification.	Still being considered
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	Until the issue with customer readings being sent to MADRAS in error is resolved, either: 1. Do not allow customer readings for CTCX; or 2. Check customer readings are correctly handled in MADRAS if they are used.	Cleared

CTCS material change audit

Contact provided a copy of their material change audit report for CTCX conducted in March 2020 by Tara Gannon of Veritek Limited. The summary tables below show the statuses of the non-compliance and recommendations raised in the previous audit. Further comment is made in the relevant sections of this report.

Subject	Section	Clause	Non-compliance	Status
HHR aggregates information provision to the reconciliation manager	11.4	15.8	Aggregates file contains submission information.	Still existing

Subject	Section	Clause	Recommendation	Status
ICPs at new or ready status for 24 months	3.10	15 Schedule 11.1	I recommend Simply Energy run a registry list six monthly with: Status: 000 or 999 Proposed trader: CTCs End date: the day the report is run and compare the results to the ICPs Simply Energy expects to be at “new” or “ready” status. Any ICPs which appear to have been assigned in error can then be checked with the distributor.	Cleared, no ICPs have been supplied for more than 24 months
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	Consider adding the MU (unmetered supply) and OC (occupied premises) codes to the AN code hierarchy to ensure that AA (accept and acknowledge) is only used when no other codes are applicable.	Still being considered
Losing trader must provide final information - standard switch	4.3	5 of schedule 11.3	Consider reviewing the estimated daily consumption calculation to ensure compliance with the registry functional specification.	Still being considered
Derivation of volume information	9.2	3(4) Schedule 15.2	Not entering temporary estimates is likely to cause non-compliance with Clause 3(4) Schedule 15.2 which requires volumes to be derived from actual, permanent estimate or estimate data.	Processes for estimation are in place, but estimates have not consistently been created
Half hour estimates	9.4	15 Schedule 15.2	Not entering temporary estimates is likely to cause non-compliance with Clause 15 Schedule 15.2 which requires participants to provide a best estimate of consumption for submission where actual data is not available. Reasonable endeavours should be used to ensure any estimates are within $\pm 10\%$ of the actual data if it later becomes available.	Processes for estimation are in place, but estimates have not consistently been created
Calculation of ICP days	11.2	15.6	Not entering temporary estimates is likely to cause non-compliance with Clause 15.6 because ICPs with missing volume data will be excluded from the ICP days submissions for any affected trading periods.	Processes for estimation are in place, but estimates have not consistently been created

Subject	Section	Clause	Recommendation	Status
HHR aggregates information provision to the reconciliation manager	11.4	15.8	Not entering temporary estimates is likely to cause non-compliance with Clause 15.8 because ICPs with missing volume data will be excluded from the HHR volumes and HHR aggregates submissions for any affected trading periods.	Processes for estimation are in place, but estimates have not consistently been created
Accuracy of submission information	12.7	15.12 of part 15	Not entering temporary estimates is likely to cause non-compliance with Clause 15.8 because ICPs with missing volume data will be excluded from the HHR volumes and HHR aggregates submissions for any affected trading periods.	Processes for estimation are in place, but estimates have not consistently been created

1.11. Participants to give access (Clause 16A.4)

Code reference

Clause 16A.4

Code related audit information

(1) A participant must give the Authority or an auditor full access to all information that may be required for the purposes of carrying out an audit.

(2) The participant must provide the information—

(a) at no charge; and

(b) no later than 15 business days after receiving a request for the information from the Authority or an auditor, as the case may be.

Audit observation

The code requires that information requested by the auditor be provided within 15 business days of the request. Veritek provided an information request to Contact and their agent for the purposes of this audit

Audit commentary

Whilst most information was provided within the required timeframe (by 30/04/20), some information was not provided by Simply Energy until 15/07/20. This is recorded as non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 1.11 With: Clause 16A.4 From: 01-May-20 To: 15-Jul-20	CTCS and CTCX Information not provided within 15 business days of the request. 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 as most information was generally provided as requested but there is a resource constraint at Simply hence overall control rating. The audit risk rating is low as the information was eventually provided but this impacted analysis time.		
Actions taken to resolve the issue		Completion date	Remedial action status
There is no current action to this issue as it has already passed.		01/09/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Process documentation has been updated to clearly show the business days required to provide information in future audits.		01/09/2020	

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.

CTCT

The registry list as at 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were examined to identify any registry discrepancies, and to confirm that all information was correct and not misleading.

CTCX and CTCS

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to identify any registry discrepancies, and to confirm that all information was correct and not misleading.

Audit commentary

CTCT

Registry and static data accuracy

Registry data is verified against Contact's own records on a regular basis. All fields in the registry are validated against SAP. Contact demonstrated a comprehensive schedule detailing fields that are validated monthly and other fields that are validated on a more frequent basis determined by the discrepancy being assessed. This includes the submission aggregation factors.

The analysis found:

Issue	2020 Qty	2019 Qty	2018 Qty	2017 Qty	Comments
ICP at status "new connection in progress" (1,12)	0	2	2	0	Compliant
Active date variance with Initial Electrical Connection Date	102	41	11	50	See section 3.5

Issue	2020 Qty	2019 Qty	2018 Qty	2017 Qty	Comments
Active ICPs with metering category 3 or higher with NHH submission flag	0	0	0	0	Compliant
Active ICPs with blank ANZSIC codes	0	0	0	0	Compliant
Active ICPs with ANZSIC "T994" or "T994000" don't know	1	140	183	524	Unknown ANZSIC codes are recorded as non-compliance. See section 3.6.
Active ICPs with ANZSIC "T997" "response unidentifiable"	0	0	0	0	Compliant
Active ICPs with ANZSIC "T998" "response outside of scope"	0	0	0	1	Compliant
Active ICPs with ANZSIC "T99", "T999" or "T999999" not stated	0	28	30	161	Compliant
Active ICPs with metering category 3 or above with a residential ANZSIC code	0	0	0	1	Compliant
Active ICP with no MEP and unmetered flag set to N	32	302	97	116	See sections 2.9 and 3.4
Active ICP with meter category 9 or blank and unmetered flag set to N	32	170	-	-	See sections 2.9, 3.4 and 3.8
ICPs with Distributor unmetered load populated but retail unmetered load is blank or 0	1	15	17	31	See section 3.7
ICPs with unmetered load flag Y but load is recorded as zero, excluding SB ICPs	1	2	6	0	See section 3.7.
ICP with incorrect standard unmetered load	72	184	1	0	See section 3.7.
ICPs with incorrect shared unmetered load	1	0	2	7	See section 5.1
Submission against the RPS profile where the registry has a controlled profile.	310	1,918	16,816	19,821	Contact's reconciliation process applies RPS if a profile requiring a certified control device is recorded on the registry and the ICP does not meet the metering or certification requirements for that profile to be applied.

Issue	2020 Qty	2019 Qty	2018 Qty	2017 Qty	Comments
					310 ICPs have a controlled profile recorded on the registry but are submitted as RPS. This dramatic improvement has been achieved by working with the MEPs to update their certification details on the registry, including correction of control device certification flags. See section 6.3 .
Active ICPs with invalid NHH and/or HHR profiles recorded on the registry.	26	1,373	396	10	<p>HHR and NHH submission flags = Y</p> <p>143 ICPs had the HHR and NHH submission flags set to Y.</p> <p>120 were HHR metered ICPs with some unmetered load which is settled as NHH.</p> <p>10 were corrected prior to the audit.</p> <p>The 13 remaining exceptions were corrected during the audit. Nine were caused by the fix for defect 5378, which resulted in incorrect registry updates where ICPs moved from an unmetered BTS to permanent (see section 11.2), the other exception was created when transferring HHR metered load and NHH unmetered load to a new ICP.</p> <p>NHH submission type and HHR profile</p> <p>6 ICPs had NHH submission type with HHR profile, a decrease from 826 in the 2019 audit.</p> <p>Two had corrections processed through Contact's validation process prior to the audit, and one was a DUMML ICP with some metered load attached.</p> <p>The other three ICPs were registry discrepancies and the submission types and profiles were correct in SAP. All were corrected during the audit.</p>
Incorrect generation profiles recorded on the registry.	1	10	45	-	Ten discrepancies were identified. Nine were corrected to RPS PV1 profile prior to the audit. Contact is still investigating whether ICP

Issue	2020 Qty	2019 Qty	2018 Qty	2017 Qty	Comments
					0004301000CA520 is generating. Refer to section 6.1 .
Arc category 2 meters submitted as HHR	-	10	-	-	CTCT has 5,968 active ARCS HHR settled ICPs. All have metering category 1, and have the multiplier flag = N.
Incorrect status recorded on the registry	1	5	-	-	ICP 0000366150MP46C0 incorrectly recorded as disconnected on the registry but is active

Examination of the NHH to HHR and HHR to NHH meter changes, discussed in **section 6.7**, found that whilst the NHH meter reading is applied correctly, the registry cannot reflect that an ICP is both HHR and NHH on the same day, therefore causing a discrepancy between the profile recorded on the day of meter change. This has no material impact on reconciliation.

There has been significant progress in reducing the number of reconciliation profile discrepancies, and resolving status discrepancy issues. The following registry and static data accuracy issues were identified during the audit for CTCT, which were not resolved as soon as practicable:

Issue	Description	Section
The registry profile does not reflect the profile applied for reconciliation	As discussed above a decreasing number of ICPs have a different profile recorded on the registry to the profile applied for submission. Some corrections were processed during the audit, and the remaining exceptions have been left to maintain visibility of the affected ICPs.	2.1
Incorrect trader event date for ICP 0000005951TEECC	0000005951TEECC (19/05/20) registry profile change was a registry data correction only and was updated from the day prior to the update date, instead of the date the profile applied in SAP.	12.13
Settlement unit data	ICP days were not reported correctly where settlement unit information was incorrect in SAP, or a system defect resulted in an incorrect submission type being applied. Contact has been working to resolve these issues before revision 14, and the ICP days differences are generally small. Some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data. Revised data will be provided through the revision process.	11.2, 11.4

Read and volume data accuracy

Read and volume accuracy issues are identified through CTCT's validation processes, which are described in detail in **sections 9.5** and **9.6**.

A spreadsheet template is used to estimate consumption in situations where meters are determined to be recording incorrectly or are stopped. The template uses historic consumption from periods prior to the fault, or consumption recorded by a replacement meter after the fault. Correction activity is conducted by a limited number of experienced staff in the revenue assurance and reconciliation teams to ensure accuracy and consistency.

The correction is then processed in SAP by either:

1. reversing the bill, correcting the readings, and rebilling,
2. adding consumption to an existing reconciliation period record, this allows the change to be independent of billing to the customer if necessary, or
3. where a meter is stopped, faulty, or bridged, Contact can close the meter on an estimated closing read which includes the unrecorded consumption and restart the meter on the correct read.

For each of the correction methods the consumption will flow through to reconciliation submissions. Correction occurs within the 14-month period if the period affected is longer than 14 months. This ensures all consumption is accounted for.

I checked a sample of NHH corrections as described in the table below:

Defective meters	<p>I checked 11 examples of suspected stopped or faulty meters. In all cases corrections had been appropriately processed, and the full correction was within the 14-month period.</p> <p>During Smartco's 2019 audit, a failed CT was identified for ICP 0003860754TP8CD and its certification was cancelled. The meter is remotely located and rural, and field services jobs were raised to check and recertify the meter in March 2019 and May 2019. Contact is still waiting for the job to be completed so that a correction can be processed.</p>
Incorrect multipliers	<p>Multiplier corrections are processed by reversing invoices for the affected period, correcting the master data and then re-invoicing. Ten examples of incorrect multipliers were identified during the audit period, and all were processed correctly.</p>
Bridged meters	<p>Contact is working with the MEPs to reduce the number of bypasses necessary.</p> <p>Bridged meters requiring correction are identified by searching for field services jobs with the word or part word "bridge" in the description, or through the zero consumption validation process. Consumption during the bridged period is estimated based on the daily average consumption while unbridged. For new switch ins this is calculated based on the daily average consumption in the CS file, and for existing customers it is based on the actual daily average consumption before or after the bridged period occurred. If there is insufficient history to estimate, 25 kWh per day will be applied as a default value.</p> <p>Up until March 2019, Contact monitored ICPs believed to be bridged fortnightly, and processed corrections. Following an ORB system upgrade, it is no longer possible to efficiently obtain information on ICPs which have been bridged, and each field services job type must be searched through individually. The process is run quarterly, and the ORB release to update the reporting is currently on hold.</p> <p>I reviewed ten examples of bridged meters and found four had corrections processed as expected. The other six ICPs were corrected during the audit.</p> <p>The 2019 audit found a correction had not been processed for ICP 0002361613TPE7A which was bridged from 31/08/18 to 10/09/18. I confirmed that a correction was processed for revision 14.</p>
Consumption while inactive	<p>BPEMs are generated for the assurance team when consumption occurs on an inactive site. A robot initially validates the consumption to determine whether it is likely to be genuine, then it is reviewed by a user who will correct the status, add disconnection and reconnection reads and/or invalidate misreads as necessary.</p> <p>Contact also maintains a report of inactive sites with consumption, which is refreshed every month. Contact's reconciliation team uses this report to identify ICPs with consumption during periods with inactive status which have not already been corrected through the BPEM process. Depending on the volume of consumption, a correction is processed by either:</p>

	<ol style="list-style-type: none"> 1. correcting the ICP to active the status from the day before consumption was detected with a reconnection read which matches the disconnection read, or 2. adding the inactive consumption to an existing reconciliation period record which allows the change to be independent of billing to the customer. <p>The review of ICPs with inactive consumption sometimes identifies switched ICPs which were reconnected by the gaining trader prior to the effective switch date. Contact periodically sends lists of affected ICPs to other retailers, requesting that they ensure reconnection does not occur until the effective switch date in future. Early reconnection sometimes occurs where MEPs receive forward dated reconnection requests, but process the reconnection before the requested date.</p> <p>Contact provided a report of inactive ICPs with consumption recorded. The report contained 690 ICPs, and comments indicated that all of the ICPs with inactive consumption had been investigated. The inactive consumption still to be resolved at the time the report was run totalled 26,427 kWh, a significant reduction from 139,807 kWh during the 2019 audit and 124,345 kWh during the 2018 audit.</p> <ul style="list-style-type: none"> • 625 exceptions were resolved by updating missing, incorrect, or estimated disconnection or reconnection reads, and correcting the ICP status. I checked a diverse sample of ten corrections with different causes of inactive consumption, and confirmed that the volumes correctly flowed into reconciliation submissions or that the inactive consumption was caused by a misread. • 28 exceptions (15,120 kWh) had two settlement unit time slices ending on the same day, with one active and one inactive. SAP's process was applying the inactive unit. A SAP analyst has resolved the exceptions, and is investigating the root cause to prevent recurrence of the issue. • 37 exceptions (11,307 kWh) were indicated to be under investigation. 28 ICPs had an Arc meter with an AMI logger or controller wired downstream of the meter, which results in a small amount of energy required to keep the logger or controller energised being recorded by the meter although the supply into the installation is disconnected. Contact has been working with Arc to find a solution and intends to disconnect the ICPs at the pole to stop any energy being consumed, and move the ICPs to submission type NHH. They intend to return the ICPs to active status for one day to allow the load to be recorded. <p>I checked the other seven ICPs with inactive consumption over 300 kWh, and found it occurred because disconnection and reconnection reads had not been entered correctly due to user training issues, or settlement units had not been updated correctly. I confirmed that corrections were processed for all the affected ICPs.</p> <p>The 2019 audit found ICP 0000246174TP7F1 had inactive consumption added to an inactive period and the volume was excluded from submissions. I confirmed that a correction has now been processed and revised data submitted.</p>
Unmetered load corrections	<p>Corrections occur as required for unmetered load data. The unmetered load data for billing and reconciliation have been uncoupled, so it is possible to process an unmetered load correction without reversing billing.</p> <p>If unmetered wattage for a time slice or on hours are updated in SAP, the revised data will flow through to revision submissions.</p>

Corrections identified as being required during this audit or the previous audit have been processed, except in instances where the ICP had switched out and correction on the registry would affect another trader's period of supply. The following read and volume issues were identified during the audit for CTCT, which were not resolved as soon as practicable:

Issue	Description	Section
Incorrect read dates were recorded for ICP 0000017802EAAC8	Meter registers 217137367/1 and 217137367/2 had meter readings taken on 17/06/20 recorded with a read date of 18/06/20 in SAP.	6.7, 9.1, 12.7

CTCX and CTCs

Registry and static data accuracy

Simply Energy manage information completeness and accuracy as an agent, using the same processes as the existing trader codes that they manage.

Registry updates are processed directly on the registry using the web interface, and Salesforce is updated at the same time. Registry acknowledgement files are run through an SQL process and any errors are viewed and then resolved.

Simply Energy ensures that registry information is complete and accurate using its Salesforce dashboards. Salesforce is also used to manage workflows and ensure that registry updates are processed on time.

The Salesforce Trader Audit Dashboard checks information for each trader code against the registry and is worked through prior to business day four and 13. The checks include:

- **Don't know ANZSIC codes**, which are checked and updated,
- **ICPs with estimated switch in reads with an AMI meter**, which are checked to determine whether a read renegotiation is required,
- **ICPs that need to be set up in MADRAS**, which identifies new connections and switch ins needing to be created in MADRAS, which are then checked and updated,
- **Unmetered load on metered ICPs**, which are checked to ensure that any unmetered load is recorded and reconciled, as part of this process the unmetered load details are checked on the registry,
- **ICPs with "inactive new connection in progress status"**, are checked daily; the dashboard shows whether the MEP has accepted an MEP nomination,
- **ICPs with "inactive" status**, which are checked periodically to ensure they are genuinely disconnected,
- **ICPs with uncertified meters on reconnected sites**, are monitored and managed on a case by case basis to ensure that certified metering is in place, and
- **ICPs with an initial electrical connection date populated but the status is not active**, are monitored to identify potential new connections that have been electrically connected but not notified to Simply Energy.

The Salesforce NHH meter registry dashboard detects changes to metering details on the registry, and prompts users to check the data and process updates as necessary.

The Salesforce Operations Registry Update screen alerts users when data maintained by another participant changes on the registry, including distributor and MEP populated data. The user then checks and updates Salesforce and DataHub as necessary and ensures that changes flow through to MADRAS. This process identifies any changes to unmetered load, NSP, or distributed generation details.

The Salesforce MADRAS dashboard identifies inconsistencies with the data sent to EMS, and prior to submissions, ICP level data is compared to the registry to identify any discrepancies. These pre-submission checks are discussed in **section 12.3**.

A monthly report is run to check ICPs with an installation type of B or G. The ICPs are checked to determine whether generation is present, compliant metering is installed, and profiles are correct.

The following registry and static data accuracy issues were identified during the audit for CTCX, which were not resolved as soon as practicable:

Issue	Description	Section
ANZSIC codes	One ICP with no ANZSIC code and one incorrect ANZSIC code.	3.6
Incorrect end readings provided to EMS for 0000022997EA768	Incorrect NHH end readings were provided to EMS due to a manual copy and paste error. Simply Energy intends to investigate and supply the correct readings.	6.7
ICP set up and creation	NHH ICP days were not reported correctly because some ICPs were not set up in MADRAS, data issues prevented ICPs being sent to MADRAS, and/or incorrect start dates were applied. The issues were resolved through the revision process. HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing. Revised data will be provided through the revision process.	11.2, 11.4

No registry and static data accuracy issues were identified during the audit for CTCX, which were not resolved during the audit.

Read and volume data accuracy

Read and volume accuracy issues are identified through Simply Energy's validation processes, which are described in detail in **sections 9.5** and **9.6**.

No NHH corrections were completed for CTCX during the audit period, and I walked through the correction process for each correction type.

Defective meters	Where a meter is found to be stopped or faulty it will be replaced. Estimated consumption during the stopped or faulty period will be calculated based on the consumption of the replacement meter, or historic consumption prior to the stopped or faulty period. The consumption is typically added as permanently estimated meter removal read, and sent to EMS.
Incorrect multipliers	Multipliers are stored in Salesforce and DataHub based on the metering information held on the registry. I viewed examples of the reading files sent to EMS and historic estimates calculated by MADRAS, and confirmed that the meter multiplier accompanies the reading and is applied when historic estimate is calculated. Where a meter multiplier correction is required, the original meter is archived in MADRAS from the date of the change. A new meter is created with the correct multiplier and readings during the affected period are transferred to the new meter.

Bridged meters	<p>Bridging of meters is against Simply Energy's policies. A correction process is followed in the unlikely event bridging occurs. Estimated consumption during the bridged period will be calculated based on the consumption on the replacement meter, or historic consumption prior to the stopped or faulty period.</p> <ul style="list-style-type: none"> • If the meter is replaced as part of the unbridging process, the estimated consumption during the bridged period is added as a permanently estimated meter removal read, and sent to EMS. • If the meter is not replaced, a pseudo meter will be created to record the estimated consumption, so that it is included in reconciliation submissions.
Consumption while inactive	An end date is entered in DataHub and MADRAS when ICPs are disconnected, and an import error will be created for any reads received after disconnection. Simply Energy reviews any reads received after the end date and takes corrective action if consumption while disconnected is identified. This includes confirming whether the consumption is genuine and updating the ICP status and data stream dates if necessary.
Unmetered load corrections	Simply Energy records unmetered load by manually calculating and entering meter readings against an unmetered load register. The readings are calculated as previous reading + (daily unmetered kWh x number of days between reading dates). Where a correction is required, the reads are invalidated and recalculated and then resent to EMS using the read replacement process discussed in section 12.3 .

The following read and volume issues were identified during the audit for CTCs, which were not resolved as soon as practicable:

Issue	Description	Section
Incorrect end readings provided to EMS for 0000022997EA768	Incorrect NHH end readings were provided to EMS due to a manual copy and paste error. Simply Energy intends to investigate and supply the correct readings.	6.7, 9.1, 12.7
Missing ICP days and volumes	HHR ICP days were not reported correctly where temporary estimates were not inserted for ICPs with missing days of data up to June 2020 revision 1.	11.2, 11.4

The following read and volume issues were identified during the audit for CTCX, which were not resolved as soon as practicable:

Issue	Description	Section
Omission of ICP 0158947339LC9D1 from revision submissions	EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.	11.2, 11.4

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 2.1</p> <p>With: Clause 10.6, 11.2, 15.2</p> <p>From: 03-Jun-19</p> <p>To: 22-Jul-20</p>	<p>CTCT, CTCS and CTCX</p> <p>Some inaccurate data is recorded and was not updated as soon as practicable.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as weak. Controls are moderate for the CTCT operation. Validation processes are in place for CTCS and CTCX, but their manual nature and increased workloads resulted in some errors not being detected and resolved as soon as practicable.</p> <p>The audit risk rating is low, because the impact on submission information will wash out through the revision process, and the impact on other participants is minor.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>Active date variance with Initial Electrical Connection Date</u></p> <p>Contact has made process changes and revamped its reporting to identify any discrepancies. We have made system logic changes to pick up the variances much earlier in the process.</p> <p>We continuously work with Distributors, MEPs and our field contractors to resolve date variance between Active status event, IED, and certification dates.</p> <p>Active ICPs with ANZSIC "T994"</p> <p>Contact has robust reporting in place to identify any 'T9' series ANZSIC codes applied in the registry and corrections are made via a manual correction process on regular basis.</p> <p>The one ICP with 'T9' ANZSIC code identified was gained incorrectly from alternate retailer. ICP has been vacant since our gain date and recently corrected to vacant-disconnected. As Contact has no customer to confirm end use of the property, ANZSIC code is correct as 'unknown'.</p> <p>UNM non-compliances</p> <p>Contact has made steady improvements in UNM monitoring since the last audit. We are actively working with our customers and distributors to determine current UNM load details to resolve these non-compliances and expect this piece of work to be completed by November 2020. Contact will ensure any future</p>			Identified

<p>non-compliances will be actioned as part of our monthly reconciliation process.</p> <p>Incorrect generation profiles recorded on the Registry</p> <p>Contact has robust reporting in place to pick up any discrepancies. Ten ICPs were found to have incorrect profiles recoded in the Registry. All ICPs were corrected except ICP 0004301000CA520 and we are actively working with MEP to resolve this individual case, which we anticipate to be resolved by October 2020. Contact will ensure any future non-compliances will be actioned as part of our monthly reconciliation process.</p> <p>Incorrect status recorded on the registry</p> <p>One ICP, which was identified to have incorrect registry status, was a field contractor error. Registry status has been corrected now. Contact will continue to investigate errors from the field. These instances are regularly addressed via the contractor performance provisions within the respective agreements.</p> <p><u>Submission against the RPS profile where the registry has a controlled profile</u></p> <p>We continue our efforts to work with the MEPs as the cost to traders, such as Contact, of having to submit controlled load as RPS is significant and we believe also has the ability to distort the accurate application of UFE to all traders. Our focus is now moving to expired certified ICPs now that the population of the 'controlled device certified' flag on the registry is largely accurate.</p> <p><u>Read and volume data accuracy</u></p> <p>Contact continues to work on improving the timeframe for applying corrections to our volume data where an issue has occurred such as a stopped or bypassed meter of consumption on inactive ICPs. We continue to work with the MEP to further reduce the frequency of bridging meters and have also implemented a system improvement to apply a permanent estimate read when an actual read is not provided as part of a disconnection / reconnection.</p> <p>Incorrect read dates were recorded</p> <p>This issue only occurs for a small number of AMI meters where the communication performance is intermittent therefore no read was delivered for the scheduled meter read date. Unfortunately SAP is not able to amend the scheduled meter read date as it is associated with a corresponding billing order. We</p>		
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<p>have identified an enhancement to SAP that would resolve this issue and awaiting prioritisation of this solution</p> <p>CTCS</p> <p>The switch and also then validation of a large generation ICP impacted the ability to run estimation process on TOU ICPs in July. We have now moved the estimations process to BD3 to allow more time and believe this resolves this particular issue.</p> <p>CTCX</p> <p>The incorrect recording of readings on 0000022997EA768 has been corrected.</p>		
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Contact acknowledges the non-compliances identified by the auditors, and the underlying factors causing the late notifications to the Registry. We have extended our existing registry reconciliation reporting and will ensure any new exception categories are monitored and resolved on a monthly basis.</p>		

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 a number of 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

CTCT

NHH read data is transferred via SFTP. I traced a sample of readings and AMI data received from Contact's agents and MEPs for 14 ICPs from the source files to SAP (via the COLA database for AMI data). The sample included all NHH reading providers.

HHR volume data (including data for embedded network gateway meters) is transferred using TIBCO Virtual FTP by AMS and EDM I. I traced a sample of volumes for three HHR ICPs from the source to HDM, SAP, and the HHR aggregates submissions. I also walked through the process to create NSP volumes submissions from receipt of the meter data to submission.

BDE0111SOLEG has Transpower metering and is read by EMS, and the data is received via SFTP. The reconciliation team receives HHR data from EMS which is used to settle 0000037884WE3A6, which is the only ICP connected.

Generation data is automatically imported into SAP from MV90, and the process was walked through.

CTCX and CTCs

NHH read data is transferred via SFTP. AMI HHR interval data is imported directly into Datahub, and AMI and manual readings are loaded into the Datawarehouse and a daily read file is extracted and imported into Datahub. I traced a sample of readings and AMI data received from Contact's agents from the source files to Datahub, the sample included all NHH reading providers.

Once validation is complete in Datahub, the validated (published) reads are exported back to the Datawarehouse, and then to AXOS billing engine and EMS' MADRAS for NHH settled ICPs. Changed reads are provided to EMS at least weekly, and switch event, meter change, and NSP change readings are all provided to EMS by Simply Energy.

Up to 31/05/20 HHR volumes were collected by EMS. EMS created HHR submissions for CTCX, and provided validated data including permanent estimates for CTCs so that Simply Energy could create HHR submissions. From 01/06/20 AMS and EDM I have provided HHR data directly to Simply Energy.

HHR data for ICP 0000018218HRB13 was provided by Contact for the June 2020 initial submission. The switch was later withdrawn.

Audit commentary

CTCT

NHH

NHH data is usually provided by SFTP by MRS. From 06/03/20 MRS was affected by a data security issue, and the files were provided via a secure dropbox instead of SFTP. Contact's IT security team was responsible to retrieving and checking the files were secure prior to upload into SAP, and I saw evidence of this process. Contact and MRS reverted to the normal SFTP transfer from May 2020. I checked a sample of readings received from MRS during the affected period and business as usual and confirmed the source data matched the data recorded in SAP.

Datacol provided readings up until early 2020, after which all reads were provided by MRS. I checked a sample of four ICPs with reads provided by Datacol and found that in three cases the reads were not imported into SAP. The "true read flag" was not populated in the affected files, which prevented the reads being imported into SAP and the meter read order was closed with an estimated read. I verified that other Datacol files with the "true read flag" validly populated were correctly imported. MRS

confirmed that during the period where reads were being provided from SevenX (Datacol) and MeterOr (MRS) there were some files where the “true read flag” was not correctly populated. The issue was not fully investigated because the ICPs were in the process of migrating to MeterOr which resolved the issue.

I checked a sample of readings received from AMS, Arc, FCLM, Smartco, Metrix, and Intellihub and confirmed the source data matched the data recorded in SAP, except for Smartco ICP 0000017802EAAC8. Readings were received for two of the four registers on 18/06/20, and the AMI reads for the missing registers for 17/06/20 were entered into SAP against the open meter read order with a read date of 18/06/20. Where a read is not obtained on the meter read order date, SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers and records it as actual against the meter read order date. An exception is generated where the read dates do not match, but they are bulk closed without investigation. This is recorded as non-compliance in **sections 6.7, 9.1 and 12.7**.

HHR data for AMI category 1 and 2 meters is received via SFTP for AMS, Arc, FCLM, Counties Power, Smartco, Metrix, and BOPE and imported into the COLA database and where it is monitored using the Smart Read Dashboard interface, queried and viewed using the Smart Reads Console interface, and validated using the IMDM validation interface. The validated data is then imported into SAP. I checked a sample of HHR AMI data received from AMS, Arc, FCLM, Metrix and BOPE and confirmed that the source data matched the data recorded in SAP.

HHR

For all meters with category 3 and above, or category 1 and 2 HHR meters which are commercial or industrial, EDM I provides HHR data via Contact’s portal and AMS provides data using TIBCO Virtual FTP. The sample of data checked was transferred completely and accurately.

I confirmed that the profile data applied for 0000037884WE3A6 was consistent with the data received from EMS for BDE0111SOLEG for May 2019.

Generation

Generation data is imported into SAP via MV90. I traced a sample of data from MV90/Oracle through to SAP and confirmed that it was recorded correctly.

CTCX and CTCS

NHH

I traced a diverse sample of readings and AMI HHR volumes from the source files through to Datahub, and the aggregates submissions for HHR settled ICPs or MADRAS for NHH settled ICPs. Compliance is confirmed.

HHR

EMS was responsible for HHR data collection up to 31/05/20 and compliance is recorded in their agent audit report.

For CTCS, EMS provided validated HHR data and permanent estimates in EIEP3 format, which Simply Energy imported into Datahub and the datawarehouse. I traced volumes for two ICPs from the EIEP3 files provided by EMS through to the submission files, and confirmed that the data was recorded accurately.

From 01/06/20 AMS and EDM I have provided HHR data. I traced a sample of data from the raw meter data files provided by AMS and EDM I through to the submission files, and confirmed that the data was recorded accurately.

ICP 0000018218HRB13 is a generation ICP which switched from CTCT to CTCS in error as part of tranche 1. Once the error was realised, there was insufficient time to complete a switch withdrawal before

submission was completed. Contact provided submission information via email, which Simply Energy added to the CTCS HHR submission. I confirmed that the volume submitted matched the volume provided by Contact.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.3 With: Clause 20 Schedule 15.2 From: 01-Jun-20 To: 30-Jun-20	CTCS June 2020 volume data for ICP 0000018218HRB13 was provided by email. 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, this was a one off issue relating to a switch which was later withdrawn. There is no impact on settlement, Simply Energy and Contact worked together to ensure that the volumes applied for submission matched Contact's source file. The switch was later withdrawn and revisions will be provided in CTCT's submissions.		
Actions taken to resolve the issue		Completion date	Remedial action status
The data provided to Simply Energy by Contact was marked as an estimate as the data was provided in a spreadsheet.		1/09/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We believe this is a one off incident.		01/09/2020	

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 for the person who performed the activity (clause 21(4)(c)).*

Audit observation

A complete audit trail was checked for all data gathering, validation and processing functions. I reviewed audit trails for a small sample of events. Large samples were not necessary because audit trail fields are expected to be the same for every transaction of the same type.

Audit commentary

CTCT

A complete audit trail was viewed for all data gathering, validation and processing functions. The logs of these activities for Contact and all agents include the activity identifier, date and time and an operator identifier.

Audit trails are created for generation data, but are not in a single location for corrections. During the audit Contact updated its processes to ensure that its manual correction journals store all the required audit trail information in one place including:

- date,
- time,
- operator ID,
- data corrected,
- technique used,
- reason for alteration, and
- approval of the correction.

CTCS and CTCX

An audit trail was reviewed for data gathering, validation and processing functions in Datahub. The logs of these activities include the activity identifier, date and time and an operator identifier. I confirmed the original data is retained during the estimation and correction processes.

A compliant manual permanent estimate log is used where permanent estimates are created, and I saw evidence that this is kept up to date.

SalesForce operators use generic logins, which are shared by three to five operators. This means that the audit trails do not record the individual user who made the change. The impact of this is low, because SalesForce data which is also held in the registry is updated at the same time, and each user has their own SQL server login which is used to access the registry.

Agent systems

Compliance is recorded in the agent audit reports.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.4 With: Clause 21 Schedule 15.2 From: 01-Sep-19 To: 22-Jul-20	CTCS and CTCX SalesForce user IDs are shared, and the audit trails do not record the individual user who made the change. 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 rated as strong and the impact as low. Audit trails are available and contain the required information, but the person who processed the change is not identifiable within the audit trail because there is only one operator identifier. A small number of users have access. For the sample of audit trails reviewed, the person responsible for processing the change was identified through supporting information.		
Actions taken to resolve the issue		Completion date	Remedial action status
Simply Energy is currently reviewing the costs of increasing numbers of individual users in accessing Sales Force.		01/09/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
There is no further action here.		01/09/2020	

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 Contact's current terms and conditions.

Audit commentary

Contact's terms and conditions include arrangements for meter access and shutdowns and these clauses extend to Contact's agents and are mirrored in agreements with MEPs.

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

Audit commentary

Contact's contract with their customers includes consent to access for authorised parties for the duration of the contract. Contact confirmed that they have been able to arrange access for other parties when requested. This was observed with the meter reading process and with the field services process.

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

A discussion was held regarding knowledge of any ICPs with loss compensation present. The presence of loss compensation factors was also checked with the HHR data team.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11.15B

Code related audit information

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

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

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

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

Audit observation

I reviewed Contact's current terms and conditions.

Audit commentary

Contact'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 1 or more metering installations for the point of connection.

Audit observation

The new connection processes were examined in detail to evaluate the strength of controls.

CTCT

The registry list file as at 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were examined to confirm process compliance.

Late updates to active for new connections are discussed in **section 3.5**.

CTCX and CTCX

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to confirm process compliance.

Audit commentary

CTCT

Contact Energy has blanket agreements in place with most Distributors that if they are proposed as the trader for a new ICP they will always accept the nomination. Contact's first notification of a new connection is when they receive the notification from the network of the ICP. They then contact the customer and create a customer in SAP for the new connection to progress. If the customer makes contact directly, a request for an ICP is sent to the relevant Distributor to create. A weekly check is run in by the registry team to identify any ICPs where Contact is nominated but no customer exists in SAP. Any ICPs identified are investigated to determine the next action on a case by case basis. The management of ICPs

at the “Ready” status where Contact is the nominated trader for greater than 24 months is discussed in **section 3.10**.

Contact do not use the “inactive-new connection in progress” status in the new connection process but instead claim the ICP from “ready” and make it “active”. This practice is compliant providing the ICP is made active within five business days of the event. For any ICPs updated late, the MEP nomination will also be late, as this is sent at the same time as the ICP is made active. The late MEP nomination is recorded as non-compliance in **section 3.4**.

I checked 40 NHH ICPs and 18 HHR new connections identified. In all cases, Contact had accepted responsibility.

Contact has arrangements in place with all MEPs including IntelliHUB NZ Ltd which was recorded as a non-compliance in the last report.

The audit compliance report found active 32 ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. All were checked:

Count	Comment	Outcome
27	MEP nomination made and accepted, awaiting meter details.	Compliant
3	Meter details or the status was updated on the registry after the list report was run.	Compliant
2	Metering details have been removed in both cases the ICPs should have been recorded as “Inactive - ready to decommission status”. The incorrect status is recorded as non-compliance in section 3.8 .	Compliant
32		

The audit compliance report found four ICPs where the MEP has been nominated but no response has been received within 14 days of the nomination. These were examined and found in three cases the correct MEP was nominated and they were late accepting. The incorrect MEP was nominated for ICP 0000234047MPE57 as the incorrect meter owner was recorded on the returned paperwork. The MEP rejected the day after the nomination, but some investigation was required before the correct MEP was nominated a month later.

CTCX and CTCX

There have been no changes to the new connection process since Simply Energy manage new connections as an agent, using the same processes as the existing trader codes that they manage and there have been no changes made to this process since the material change audit.

There have been no new connections completed for CTCX or CTCX as yet, but I reviewed the new connection process. Contact will provide Simply Energy with all the relevant details for which to set the customer up. The ICP is then added to a workflow and this raises a job for the new connection to be completed. The workflow is monitored to ensure that the job is completed, and Simply Energy’s system and the registry are updated.

The new connection process contains a step for Simply Energy to accept responsibility. Responsibility is accepted for each individual ICP and requires an MEP to be selected. If FCLM are to be the MEP, Simply Energy completes the nomination when the ICP is moved to “inactive new connection in progress status”. For other MEPs, Simply Energy will claim the ICP with the “active” status and nominates the MEP as soon as paperwork is received.

The new connection job template states that certification is required and requests a load bank be taken if the site is not connected. Staff monitor this and contact the MEP if certification is not received promptly.

Audit outcome

Compliant

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

Code reference

Clause 10.33(1)

Code related audit information

A reconciliation participant may temporarily electrically connect a point of connection, or authorise a MEP to temporarily electrically connect 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:*
- *the reconciliation participant is recorded in the registry as the trader responsible for the ICP*
- *if the ICP has metered load, 1 or more certified metering installations are in place*
- *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

CTCT

The new connection process was examined in detail to evaluate the strength of controls. The list file, event detail report and audit compliance report for 1/06/19 to 3/05/20 were analysed to confirm the process is compliant and controls are functioning as expected.

CTCX and CTCS

All ICPs certified prior to their active date were reviewed to determine whether they had been temporarily electrically connected.

Audit commentary

CTCT

Review of the list and event detail reports did not identify any HHR ICPs which had been temporarily electrically connected.

Four NHH ICPs which may have been temporarily electrically connected were identified. All were examined and none were found to have been temporarily electrically connected.

CTCX and CTCS

No new connections have been completed since CTCX and CTCS commenced trading.

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:
 - the reconciliation participant is recorded in the registry as the trader responsible for the ICP
 - if the ICP has metered load, one or more certified metering installations are in place
 - if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.

Audit observation

The new connection and reconnection processes were examined in detail to evaluate the strength of controls.

CTCT

The registry list file as at 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were examined to confirm process compliance and that controls are functioning as expected.

CTCX and CTCX

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to confirm process compliance and that controls are functioning as expected.

Audit commentary

CTCT

Active ICPs without metering

The audit compliance report found active 32 ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. All were checked and confirmed to be compliant. These are detailed in **section 2.9**.

New Connections

Contact does not use the “inactive - new connection in progress” status.

Non-half Hour

Contact had accepted responsibility for all newly electrically connected ICPs. The audit compliance report found 103 NHH ICPs that were not certified within five business days of electrical connection. An extreme sample of ten of these were examined and found all were unmetered builders supplies and a meter was not installed until they became permanent.

There were 19 ICPs with no certification recorded. A sample of the five oldest ICPs were checked and found:

- for three ICPs the MEP has since updated the registry with the metering for three ICPs and all were certified on the same day as electrical connection,

- ICP 0000708731WP694 is part of an ICP split; the meter was certified on the day of electrical connection and this has not been loaded to the registry, and
- ICP 0000105712UN880 switched in disconnected and had been since 2005 and was reconnected. This is not a new connection; the meter has expired certification which is recorded as non-compliance below in the reconnections.

Half Hour

The audit compliance report found five HHR ICPs that were not certified within five business days of electrical connection. These were checked and found four were certified late. ICP 0000043000HR539 was certified as a lower category but the certification was never loaded to the registry. The four late certifications are recorded as non-compliance.

Three HHR new connections had no meter certification recorded. These were checked and found:

- ICP 0003360053ML77E was certified at the time of electrical connection,
- ICP 0002272387ML141 was electrically connected on 4/02/20 but has not been certified as yet, because there was a comms issue with this site that was not resolved until 2/06/20 when data was delivered; the delay was affected by COVID-19, and
- ICP 0003360054MLAB4 was electrically connected on 11/02/20 but was not certified until 7/05/20.

The two ICPs certified late are recorded as non-compliance below.

Reconnections

The audit review noted that there was no process in place to ensure reconnected ICPs have installations certified. Contact have put a process in place. A report is run weekly to identify these installations. A service order is raised to get the site recertified unless these are identified as part of an AMI rollout. In this case the meter replacement is already underway. There is an issue in the Scanpower area for any sites with an ARC meter as the MEP has no resource available to replace the meter. Contact are working to find a solution for such sites. The audit compliance report identified a total of ten ICPs affected by this.

The audit compliance report identified 209 reconnected ICPs where the meter has no current certification. This is an increase from the 74 ICPs identified in the last audit. A diverse sample of 20 were checked and found:

- seven ICPs are awaiting confirmation from the MEP as to whether these are being replaced as part of the AMI rollout or a service request is to be raised,
- four have service requests raised and are in progress with the MEP to replace the meters,
- three have either switched away or have since been disconnected,
- two have since had new meters installed,
- two are in the Scanpower area and are affected by the issue above, and
- two are included in the AMI meter roll out.

The process in place will ensure that meters are recertified but will likely take longer than five business days to be resolved hence the increase in number found. This is recorded as non-compliance.

Bridged meters

Contact confirmed 164 ICPs were bridged to reconnect during the audit period and 147 were later unbridged. Meters are required to be certified on unbridging.

Contact issues requests to MEPs to unbridge AMI meters, and Delta to unbridge legacy meters. Contact expects that MEPs will recertify AMI meters as part of the unbridging process, and Delta will arrange meter replacement and certification when unbridging legacy meters.

I reviewed the certification details for the 147 ICPs with bridged meters which were unbridged during the audit period:

- 129 were recertified on unbridging, and
- 18 were not recertified on unbridging; I checked a sample of ten ICPs and found they were either unbridged by Delta without the metering being replaced, or unbridged by the MEP without being recertified.

The 18 ICPs which were not recertified upon being unbridged are recorded as non-compliance below.

CTCX

Active ICPs without metering

The audit compliance report found two ICPs without metering. Both were residual load ICPs that were not unmetered ICPs.

New Connections

No new connections were identified during the audit period.

Reconnections

Where an uncertified meter requires reconnection, Simply Energy attempts to arrange a meter replacement or recertification at the time of reconnection.

No reconnections were identified during the audit period.

Bridged meters

No bridged meters were identified during the audit period.

CTCS

Active ICPs without metering

The audit compliance report found one ICP without metering. This is an unmetered ICP and is compliant.

New Connections

No new connections were identified during the audit period.

Reconnections

Where an uncertified meter requires reconnection, Simply Energy attempts to arrange a meter replacement or recertification at the time of reconnection.

No reconnections were identified during the audit period.

Bridged meters

No bridged meters were identified during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 2.11</p> <p>With: Clause 10.33A</p> <p>From: 22-May-19</p> <p>To: 25-Mar-20</p>	<p>CTCT</p> <p>18 ICPs' meters were not recertified on unbridging.</p> <p>Six HHR new connections not certified within five days.</p> <p>209 ICPs reconnected without having metering certified within 5 business days.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate. Uncertified meters are now identified but there is room for improvement to complete these in a timely manner.</p> <p>The audit risk rating is low as this has no direct impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>We acknowledge that reconnections of ICPs have occurred without recertifying metering, particularly with legacy metering assets not owned by CTCT. A report is run to identify ICPs reconnected where the metering certification has expired, however the frequency of this report was not providing enough time for parties to meet the required 5 day timeframe. This process has since been amended to run daily to ensure that any parties involved have enough time to recertify the installation. With AMI assets: Service Orders (SOs) are issued to MEPs with an expectation that their asset is to be recertified for any unbridging cases. While reviewing historic SOs, it was identified that not all SOs specifically included an instruction to 'recertify'. The wording on the SO requests has now been amended to ensure that all unbridging requests include the request to recertify.</p>		01/09/20	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Updates to the processes have been outlined in the above actions taken to resolve.</p>		01/09/20	

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 and controls within each system were checked.

Audit commentary

CTCT

Contact demonstrated the existence of either a UoSA or other trading arrangement for all relevant networks. The NSP is added to SAP once the UoSA is in place. Therefore, SAP will not accept a new ICP or ICP switching from a network where there is no agreement.

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

CTCX and CTCS

Networks must be recorded in Salesforce before ICPs can be assigned to them.

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 and a check of controls within each system.

Audit commentary

CTCT

Contact has an arrangement in place with all MEPs that manage metering in relation to their customer base including IntelliHUB Ltd. This was put in place in February 2020.

The new connection process contains a step that requires nomination of an MEP. MEP MN rejections are monitored. There were nine incorrect nominations during the audit period that were subsequently corrected.

CTCX and CTCS

MEPs must be recorded in Salesforce before ICPs can be assigned to them.

CTCX and CTCS trade on ICPs with eight different MEPs. I confirmed compliant arrangements are in place with all.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The “new connections” process was examined in detail to confirm compliance with the requirement to obtain ICP identifiers for points of connection to local or embedded networks.

Audit commentary

A walkthrough of the process confirmed that this requirement is well understood and managed for all Contact’s participant codes. There were no connections to networks identified without ICPs.

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 process was examined in detail.

CTCT

The registry list as at list file as at 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were examined to evaluate the updating of the registry in relation to new connections. This clause links directly to **section 3.5** below. The findings for the timeliness of updates are detailed there.

CTCX and CTCS

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to confirm process compliance. No new connections have occurred during the audit period.

Audit commentary

CTCT, CTCX and CTCS

The new connection processes are detailed in **section 2.9** above. The processes 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 5 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.

CTCT

The audit compliance report for 1/05/19 to 9/04/20 was reviewed. A sample of late status updates, trader updates and MEP nominations were checked as described in the audit commentary.

CTCX and CTCS

The event detail reports and audit compliance reports for both codes from 1/06/19 to 3/05/20 were reviewed.

Audit commentary

CTCT

Updates to active status

All status changes apart from moving an ICP to “Inactive - ready for decommissioning” are completed automatically upon the closure of the field service request providing all the relevant information is provided. This automation has reduced the time to update the registry.

The timeliness of status updates to active (for reconnections) is set out on the table below.

Status	Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Active	2015	1,991	81%	8.7
	2016	2,760	85%	7.6
	2017	3,578	91%	12.7
	2018	2,707	86%	10.2
	2019	3,762	90%	5.4
	2020	1,186	91.33%	4.17

310 of the late updates were made more than 30 business days after the event date, and the latest update was made 1,186 business days after the event date. I checked an extreme case sample of the ten latest updates, and ten updates between 20 and 100 business days late:

- seven ICPs were backdated as a result of the detection of consumption on a disconnected ICP; in this instance the ICP is returned to active so the ICP the volumes can be reconciled,
- six ICPs are ICPs being decommissioned and the process wasn't followed correctly resulting in one active date prior to decommissioning; these have all been corrected,
- five ICPs were found backdated to correct the active date,
- one ICP was late due to late paperwork from the field, and
- one ICP was late due to internal delays.

Updates to inactive status

The ready to decommission status updates are automated except for those that are notified by the network. Contact will only update these ICPs once they have been confirmed to be ready for decommissioning. This can cause further delays in updates for already late notifications.

The timeliness of status updates to inactive is set out on the table below.

Status	Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Inactive	2015	794	93%	3.9
	2016	462	96%	9.6
	2017	324	98%	1.2

Status	Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
	2018	461	94%	4.0
	2019	486	98%	2.0
	2020	860	94.44%	5.43

The above increase in volume of late inactive updates is not a reflection of a decline in performance but that ready for decommissioning is now included with all disconnected status updates in the audit compliance reporting.

I checked an extreme case sample of the ten latest updates, and ten updates between 20 and 100 business days late:

- seven ICPs were due to operator error in the first instance requiring a backdated status update to correct,
- six ICPs were due to late notification from the field or the network (for decommissioning ICPs),
- three ICPs were due to the switching process that updates all gained ICPs to active as reconnections are expected to be issued for any disconnected ICPs and in these instances the ICPs were not reconnected and had to be corrected until the reconnection could be completed,
- three ICPs were backdated as the status update to the registry failed and this was not picked up within five business days, and
- one ICP was at the “ready to be decommissioned” status but the meter was confirmed to be on site so the status was updated to “Inactive-vacant” until this could be resolved.

The late updates were processed for the correct event date.

Trader updates

Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2020	16,591	90.63%	5.21

I checked an extreme case sample of the 20 latest updates, and 20 updates between 30 and 120 business days late:

- ten ICPs had backdated profile corrections to ensure submission was correct,
- ten ICPs were late MEP nominations:
 - six were due to late paperwork from the field or late notification from the MEP to be nominated,
 - three were due to backdated switches; the losing trader had an MEP nomination in progress at the time of switch and these events are reversed by the registry before CTCT can nominate the MEP,
 - the MEP nomination for ICP 0008665795NV41C was not sent as this was a TOU site and the profile was missing (this was identified via the registry discrepancy reporting in June 2019 and thought to be human error until November 2019 when it was determined to be a system issue - IT deployed a fix in February 2020 and no further examples were identified in my samples),

- ten ICPs were due to the issue when the unmetered load is updated and SAP updates the registry to the RPS HHR profile incorrectly and these updates were made to correct these (there has been a fix deployed in SAP to stop this but I note the RPS HHR profile is still being applied in other instances which are identified as part of the registry discrepancy reporting and corrected until IT can find a fix for these); and
- ten ICPs were corrections to the ANZSIC codes discovered as a part of customer account changes e.g. BTS to permanent supplies.

MEP nominations are sent when the ICP is taken to active, therefore these will be late for any backdated new connections. This is discussed further in **section 2.9**.

CTCX and CTCX

Status, Trader and MEP updates

Status updates, MEP nominations, and trader updates will be processed manually on the registry.

The event detail reports found that there have been no changes made to the registry for CTCX. There were 12 trader changes for CTCX and all were compliant,

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 10 Schedule 11.1 From: 01-May-19 To: 31-May-20	CTCT Registry information not provided within 5 business days of change. Potential impact: Medium Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate as Contact has good controls to manage registry accuracy but there is room for improvement. Overall the level of compliance is high with the majority of updates being completed within five business days of the event therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Status and Trader updates All ICPs which were found to have incorrect status events applied in the registry were corrected during the audit. Additional training has been provided to ensure users are aware and follow the correct process. Contact will continue to investigate paperwork-related delays and errors from the field. These instances are regularly addressed via the contractor performance provisions within the respective agreements.		Ongoing	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Contact acknowledges the non-compliances identified and the underlying factors causing the incorrect and late notifications to the registry. Ongoing training will be provided to staff as required.</p> <p>We will continue to investigate paperwork related delays and errors from the field. These instances are regularly addressed via the contractor performance provisions within the respective agreements.</p>	Ongoing	

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

Audit observation

Retailers Responsibility to Nominate and Record MEP in the Registry

The new connection processes were discussed

CTCT

The list file as at 9/04/20 and the event detail report for the period from 1/05/19 to 9/04/20 were examined to confirm process compliance.

17 MEP nomination rejections were identified on the event detail report. These were all examined.

CTCX and CTCX

The event detail reports and audit compliance reports for both codes from 1/06/19 to 3/05/20 were examined to confirm process compliance.

There were no MEP rejections during the audit period.

ICP Decommissioning

The processes for the decommissioning of ICPs were examined.

CTCT

A typical sample of ten decommissioned ICPs was checked using the typical case method of sampling to prove the process and confirm controls are in place.

CTCX and CTCS

There were no ICPs decommissioned during the audit period.

Audit commentary

Retailers Responsibility to Nominate and Record MEP in the Registry

CTCT

Contact use BP EMs (Business Process Exception Management) generated in SAP to manage any MEP rejections.

The audit compliance report found 32 active ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. All active ICPs had an MEP nomination made and accepted.

The 17 MEP nominations rejected were examined. Three were accepted on reissue. The 14 not reissued were examined and found:

- ICP 0400628031LCAB4 switched out the day after the MEP rejection was received,
- ICP 0000543111TU747 had multiple MEP nominations until it was resolved that IHUB was the MEP and they were nominated and accepted on 1/04/20 for a meter installed on 14/2/20,
- ICP 0000013039EA569 was an ICP split and the first MEP nomination was rejected in error by ARC; they accepted the subsequent nomination on 20/4/20 for a meter installed on 17/12/19,
- nine nominations were sent in error and the correct MEP was already nominated, and
- two nominations were sent to the incorrect MEP and were reissued once the BP EM was actioned (which was approximately one month later in both instances).

In the last 11 cases the incorrect MEP nominations were sent due to the MEP options in Contact's ORB system (field work portal). This was particularly evident with SMCO meters e.g. ELIN supplying SMCO meters so ELIN was nominated but CTCT have no arrangement with ELIN and SMCO should have been nominated. I recommend that the naming protocols in ORBS be reviewed.

Description	Recommendation	Audited party comment	Remedial action
Trader responsibility for an ICP	CTCT Review MEP naming protocols in ORBS to align with MEPs.	Contact is reviewing the MEP nomination rejection process in SAP system. We are actively working with field contractors to ensure correct MEP is recoded on the field paperwork.	Investigating

CTCX and CTCS

MEP nominations will be processed as required and rejected MEP nominations will be monitored and acted upon. All ICPs have either metering or unmetered load details recorded.

ICP Decommissioning

CTCT

Contact continues with their obligations under this clause. ICPs that are vacant and active, or inactive are still maintained in SAP.

In all cases, an attempt is made to read the meter at the time of removal and if this is not possible then the last actual meter reading is used. This last actual reading is normally the one taken at the time of de-energisation. Contact also advise the MEP responsible that a site is to be decommissioned.

A sample of ten ICPs was examined to confirm an attempt to read the meter was made at the time of removal. Actual readings were obtained for all ten ICPs. Compliance is confirmed.

CTCX and CTCS

ICPs that are vacant and active, or inactive are be maintained in Simply Energy's systems.

When an ICP is decommissioned, an attempt is made to read the meter at the time of removal. If this is not possible then the last actual meter reading will be used. Simply Energy will also advise the MEP responsible that a site is to be decommissioned, and usually request the meter is removed.

There have been no ICPs decommissioned during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.4 With: Clause 11.18 From: 13-Sep-19 To: 20-Apr-20	CTCT Three incorrect MEP nominations (ICPs 0000326268TPB75, 0000234047MPE57 and 0000543111TU747) not actioned to ensure that an MEP is recorded on the registry. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate as the nomination of the correct MEP in ORB process needs review. The volumes for the affected ICPs are being billed and submitted therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact is reviewing the MEP nomination rejection process in SAP system. We are actively working with field contractors to ensure correct MEP is recoded on the field paperwork. We are in process of providing further training to users to ensure exceptions are handled efficiently and in timely manner.		Ongoing	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
Process review underway along with further user training as required.	Ongoing	

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

Code reference

Clause 9 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

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

CTCT

The registry list as at 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were analysed to confirm process compliance and that controls are functioning as expected.

CTCX and CTCS

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to confirm process compliance. No new connections have occurred during the audit period.

Audit commentary

CTCT

New connection timeliness

The table below shows that the registry was updated within five business days for 82% of new connections. This is an improvement from the previous year.

Review period end	ICPs notified greater than 5 days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2015	1,077	68%	9.7
2016	985	79%	5.6
2017	1,138	89%	3.1
2018	1,239	84%	6.0
2019	784	77%	8.0
2020	1,083	82%	5.4

Non-half hour

Contact claim ICPs from the “ready” status and change them to “active” once electrical connection has occurred.

The new connection process has been bedded in since the last audit and this is evident in the overall improvement in performance from 77% to 82% and the average time to update the registry has reduced from eight days to just over five days. I noted in this audit that the standard unmetered load new connection process (not the unmetered BTS supplies) is haphazard as it is not meter driven and the information back from the field is not always received as expected. This represents a small percentage of new connections, but these are over-represented in the number of late new connection updates to the registry. I recommend that this is reviewed.

Description	Recommendation	Audited party comment	Remedial action
Provision of information to the registry	CTCT Review unmetered new connection process.	Contact is reviewing the unmetered new connection process. We are actively working with Distributors as well as with our contractors to resolve any issues and paperwork delays.	Investigating

An extreme sample of the 19 latest updates (average of 210 days) were examined and I found:

- ten ICPs were unmetered new connections,
- four ICPs were backdated late due to the network being late to update the status to the “ready” status,
- three ICPs were corrections to the first active date based on further information from the field,
- ICP 1002066954UN848 first service order was turned down but the contractor subsequently went out using the cancelled service order and completed electrical connection on 24/07/19; this was corrected on 6/03/20, and
- ICP 0000708731WP694 was part of an ICP deconsolidation which required a subsequent field visit on 31/01/19 to confirm that the meter had been certified against the new ICP on 30/04/19.

Half Hour

Half hour connections are managed by the HDM team in Contact. The process was reviewed at the beginning of 2020 to try and improve the work flow from the sales team to the HDM team and reduce

delays. The audit compliance report identified 18 late HHR new connections. A sample of five ICPs was examined and found these were late because:

- two were due to delays getting the contract from the sales team,
- two were paperwork only as they were ICP split outs and required liaison with the relevant network to determine the correct electrical connection date, and
- one was due to late notification from the field.

As Contact does not use the “New connection in progress” status, the nomination of the MEP will be late for any ICPs not updated within the required timeframe.

New connection information accuracy

The AC020 report identified 11 ICPs with an initial electrical connection date populated which had not been made active. Nine were timing differences. ICPs 0000016043EA585 and 0002922055WA72F were checked and found:

- ICP 0000016043EA585 is part of an ICP deconsolidation electrically connected on 3/02/20 where Contact was nominated in the registry by Electricity Ashburton on 10/02/20 but did not pick this up until it was highlighted by this audit; this process is discussed further in **section 3.10**, and
- ICP 0002922055WA72F initial electrical connection date was populated in error by the network; this has since been reversed by the network and the site was electrically connected on 22/07/20 and the registry has been updated compliantly by Contact.

Active dates for new connections were compared to the distributor’s initial electrical connection date, and MEP’s certification date using the AC020 report. The AC020 report identified 2,941 ICPs with date discrepancies, and 732 were confirmed not to be genuine at the time of the audit. The remaining 2,209 were examined and found:

- 1,788 ICPs had a meter certification date which matched the active status date, but the initial electrical connection date was not populated by the distributor therefore I cannot determine if there are any potential discrepancies,
- 347 ICPs were unmetered, or were metered but the MEP had not updated certification details on the registry, and the initial electrical connection date and active date matched,
- 386 ICPs had an initial electrical connection date which matched the active status date, but the meter certification was dates were different - 384 ICPs of these were embedded networks that were previously customer networks, therefore the active date is correct, ICP 0000043000HR539 is discussed in **section 2.11** and ICP 0000018958EA035 is related to an ICP deconsolidation; and
- 318 ICPs had an active date populated but no meter certification or initial electrical connection date had been populated as yet; a sample of ten of these confirmed this was due to timing differences and all had since been populated.

The 102 ICPs (3.5% of all reported in the audit compliance report) with genuine discrepancies were checked, and found:

- 77 ICPs had a meter certification which matched the active status date, but the initial electrical connection date was different; an extreme sample of 15 ICPs with the greatest variance were checked and found:
 - for six ICPs Contact’s active date is correct and the Distributor’s initial electrical connection date is incorrect,
 - for seven ICPs Contact’s first active date is incorrect due to three main issues:
 - when the service request is closed out manually the event date will default to the date actioned unless manually entered - the operators are missing this step and these are identified by the registry discrepancy team and corrected but not all are being corrected,

- service requests are cancelled by the contractor as the work is already being completed by another contractor; this generates an email to investigate but these are not always being actioned, and
 - meter certification dates rather than the metering date are incorrectly being used from the returned service requests; in most instances the certification date and the metering date are the same, but this is not always the case,
 - further investigation to confirm the correct active date was being undertaken for ICP 0001131171TGEFC as the BTS service request was cancelled on 16/09/19 and it is unclear if this went straight to a permanent supply on 5/11/19 or a BTS was installed prior (the network's initial electrical connection date is recorded as 6/09/19),
 - ICP 0007192922RNDEC is a HHR TOU site and the network has recorded the connection date not the electrical connection date as they don't have visibility of this; I confirmed that Contact's active date was correct by looking at the consumption data,
- 15 ICPs had no meter certification recorded and the active status did not match the initial electrical connection date; these were checked and found:
 - for six ICPs Contact's active date was correct and metering certifications have since been added for five of these ICPs and ICP 1000576716PC645 is an unmetered new connection and the network has since corrected their electrical connection date to match,
 - for eight unmetered load new connection ICPs Contact's active date was incorrect and these have been corrected; and I recommend above that this process is reviewed, and
 - ICP 0003350010ML837 metering certification matched to Contact's active date suggesting that the network's initial electrical connection date is incorrect which is being investigated by Contact,
- ten ICPs had a meter certification that matched the initial electrical connection date, but this was different to the active date; these were checked and found:
 - for nine ICPs Contact's active date was incorrect due to the same three issues identified in the incorrect active dates detailed above.

The 24 ICPs with the incorrect active dates are recorded as non-compliance below and in **section 3.8**.

MEP nomination

As Contact does not use the "new connection in progress" status, the nomination of the MEP will be late for any ICPs not updated within the required timeframe. The 1,083 late new connections identified above have a late MEP nomination and are recorded as non-compliant.

ANZSIC code population

The code requires that the ANZSIC code is populated within 20 days of trading commencing. The audit compliance report identified 328 ANZSIC codes that were updated late. A typical sample of these covering ten new connections and eight ICPs that switched in during the audit period found these were updated late due to:

- late paperwork for 15 ICPs,
- ICP 0055100001WAE56 was at the "new" status hence the new connection was backdated,
- ICP 1002052677LCB6A was delayed due to a processing issue in SAP which caused the new connection to be delayed in completing, and
- late notification of an ICP split from the network for ICP 0000016999EA35F.

CTCX and CTCX

New connections

The new connection process is discussed in **section 2.9**. There have been no new connections during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 9 Schedule 11.1 From: 01-May-19 To: 09-Apr-20	CTCT 1,083 late changes to Active. 328 late ANZSIC code updates. Contact was not recorded as the responsible participant in the registry on the active date for 1,083 ICPs. Incorrect active dates for some ICPs due to processing errors. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate as they have been improved during the audit period but there are opportunities for improvement. The audit risk rating is low, because the number of ICPs affected overall is small. Late changes to Active can mean submission information is not provided at the earliest opportunity. Billing will also be delayed for some ICPs.		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>New Connections – NHH</u> Contact has made process changes and revamped its reporting to identify any discrepancies. We have made system logic changes to pick up the variances much earlier in the process. We are continuously working with Distributors, MEPs and our field contractors to resolve date variance between Active status event, IED, and certification dates. <u>Timeliness of status updates – NHH</u> Contact has developed new reporting as well as changed its existing process since the last audit. We continue to monitor the accuracy and timeliness of status event data loaded in the Electricity Registry on daily basis through our robust reporting processes.		Ongoing	Identified

Audit compliance reporting for period Jan 2020 (when process change was made) – Aug 2020 is showing big improvements:		
Timeliness	Audit 2019	Jan 2020 - Aug 2020
Percentage Compliance	77%	89.94%
Average Business Days between Status Active Event Date and Status Event input date	8	3.98
<u>MEP nomination</u>		
Contact continues to investigate issues related to paperwork delays and accuracy from the field. These instances are addressed via the contractor performance provisions within the respective agreements.		
Preventative actions taken to ensure no further issues will occur		Completion date
Ongoing reporting is in place to improve the compliance.		Ongoing

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.

CTCT

The registry list as at 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 was reviewed to check the accuracy of the ANZSIC codes.

I selected a sample of 100 active ICPs across the top ten most popular ANZSIC codes to confirm the validity of the codes applied.

CTCX and CTCX

The registry lists as at 3/05/20 and the audit compliance report for the period from 1/06/19 to 3/05/20 were reviewed to check the accuracy of the ANZSIC codes.

I selected a sample of 100 active ICPs across the top ten most popular ANZSIC codes to confirm the validity of the codes applied.

Audit commentary

CTCT

Contact captures an ANZSIC code for all new connections. For customer's switching in, it is expected that the customer service representative will verify the ANZSIC code. Contact have an initiative in progress where SAP will not display the previous code but require this to be confirmed with the customer in all instances. This is expected to improve the code accuracy.

Contact runs a monthly report to check ANZSIC code alignment between SAP and CRM. This identifies any ICPs with an ANZSIC code within the T99 series or mismatch between business class and ANZSIC, and/or the registry and SAP. Any exceptions are expected to be manually investigated and corrected.

The audit compliance report found only one active ICP with T994 code. This is an excellent result:

Issue	2020	2019	2018	2017
Active ICPs with blank ANZSIC codes	0	0	0	0
Active ICPs with ANZSIC "T994" or "T994000" don't know	1	140	183	524
Active ICPs with ANZSIC "T997" response unidentifiable	0	0	0	0
Active ICPs with ANZSIC "T998" response outside of scope	0	0	0	1
Active ICPs with ANZSIC "T99", "T999" or "T999999" not stated	0	28	30	161
Active ICPs with metering category 2 or above with a residential ANZSIC code	0	69	0	1

The post-audit review (using the new registry reports) identified 69 residential ICPs with category 2 metering installed. It was recommended that Contact Energy review these. The two ICPs that were noted as being potentially incorrect from the audit review were examined and found ICP0001123615ALEBE is a museum and the ANZSIC code has been corrected and ICP 0001136602HB453 which appeared to be a tattoo studio has been confirmed as a hidden fence (Animal fence supply and installation) has been updated to G431.

The audit compliance report identified 62 ICPs with category 2 meter and a residential ANZSIC code. A typical sample of 20 of these were reviewed and found:

- ten ICPs were residential, and
- ten ICPs were incorrect and have been corrected.

Contact are looking at putting reporting in place to ensure that these are reviewed and verified.

I checked 100 ANZSIC codes to confirm they were correct compared to google street view. I was unable to determine the potential code for nine records and 16 of the remaining 74 ICPs appeared to be incorrect. The nine ICPs were checked and found four of these were incorrect and have been corrected. The 16 apparent incorrect ANZSIC codes were checked and found four were correct and the remaining 12 ICPs have been corrected.

I checked all of the DUML ANZSIC codes and identified 23 ICPs with the incorrect codes. These have all been corrected.

CTCX and CTCS

The verification of ANZSIC codes is carried out by Contact for CTCS and CTCX. Any T99 series ANZSIC codes are identified and corrected as part of Simply Energy's existing validation processes.

I checked 10 CTCS and five CTCX ANZSIC codes to confirm they were correct compared to google street view and found:

- one incorrect ANZSIC code for CTCS which was corrected during the audit, and
- two incorrect ANZSIC codes for CTCX which were corrected during the audit.

Active ICPs with the incorrect ANZSIC code are recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.6</p> <p>With: Clause 9 (1(k) of Schedule 11.1</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT, CTCS & CTCX</p> <p>Some incorrect ANZSIC codes.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>The controls are rated as moderate. Controls are being strengthened and this audit identified further opportunities to improve controls.</p> <p>There is no impact on settlement outcomes from incorrect ANZSIC codes but there is a low impact on the Electricity Authority's reporting accuracy, therefore the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>CTCT</p> <p>The one ICP with 'T9' ANZSIC code identified was gained incorrectly from alternate retailer. ICP has been vacant since our gain date and recently corrected to vacant-disconnected. As Contact has no customer to confirm end use of the property, ANZSIC code is correct as 'unknown'. All other ICPs, which were identified to have incorrect ANZSIC code, were corrected during the audit.</p> <p>CTCS/CTCX</p> <p>Simply plans to implement an enhancement to customer systems that will permit to add ANZSIC codes as a required field on sign up.</p>		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>CTCT</p> <p>Contact has robust reporting in place to identify any 'T9' series ANZSIC codes applied in registry.</p> <p>We have extended our existing registry reconciliation reporting to ensure any new exception categories are monitored and resolved on a monthly basis.</p>		Ongoing	

<p>CTCS/CTCX</p> <p>The enhancement will ensure correct ANZSIC codes are applied at switch request as opposed to receiving incorrect codes from other Traders.</p>		
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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 audit compliance reports were examined to identify any ICPs where:

- unmetered load is identified by the distributor, but none is recorded by Contact; and
- Contact's unmetered load figure does not match with the Distributor's figure where it was possible to calculate this if the Distributor is using the recommended format and the variance is greater than 1.0kWh per day (1.0 kWh per day was chosen as a sample only; this does not indicate compliance is achieved if an error is found that is less than 1.0 kWh per day).

Audit commentary

CTCT

All unmetered load new connections or capacity changes require an application to Contact, which then follows the "new connections" process. This includes a verification process, which includes the step of questioning whether the ICP can be metered, and if not then the appropriate information is collected to ensure the daily kWh is correct. There is also a check to ensure any unmetered new connections have an annual consumption less than 3,000 kWh per annum, or between 3,000 and 6,000 kWh for approved load types. As identified in **section 3.5**, the information back from the field is reviewed to improve the time to update these connections.

Contact has reporting in place to identify when a distributor makes changes to their unmetered field or where there is distributor information, but SAP does not have the unmetered field populated. SAP holds two fields for the unmetered daily kWh, one for reconciliation and one for billing. These are now independent of each other. This enables settlement corrections to be processed without reversing and rebilling invoices. It is the reconciliation value that is validated against the registry.

Contact have undertaken some data cleansing for unmetered load during the audit period. This includes sending letters to customers to confirm their unmetered load details are correct. Unmetered BTS supplies are also being reviewed, specifically identifying disconnected and active vacant unmetered BTS supplies. A letter will be sent to these addresses requesting them to confirm if the load is still required and if there is no response these will be decommissioned.

In reviewing the unmetered load sites there are some active unmetered BTS supplies that have been present for years. In one instance I found a BTS supply since 2014. In looking at this on google there is an

occupied house. Contact are aware of this and these will be included in their plans to review all long term BTS supplies to confirm if these are in fact still BTS supplies.

Contact supplies 1,223 active ICPs with the unmetered flag set to “yes”. 242 ICPs are indicated to have shared unmetered load, and 101 ICPs have distributed unmetered load. The remainder have standard unmetered load.

Distributor and trader unmetered load details for the standard unmetered load ICPs were compared using the audit compliance report. The table below lists the discrepancies found.

Issue	2020 ICPs	Comments
Daily kWh difference more than 0.1 kWh per day	20	Six ICPs had the correct daily unmetered kWh recorded. Five ICPs are being queried with the customer to confirm the unmetered load. Two ICPs are being queried with network to confirm the correct unmetered load value. Seven ICPs had incorrect daily unmetered kWh recorded. Four were corrected during the audit.
Daily kWh difference more than 1.0 kWh per day	11	These make up 11 of the 20 ICPs recorded above. Six ICPs had the correct daily unmetered load. Three ICPs are being queried with the customer to confirm the unmetered load. One ICPs is being queried with the network to confirm the correct unmetered load value. One ICP had the incorrect daily unmetered kWh recorded on the registry and this has been corrected.
Trader’s unmetered load field is populated but the Distributor has none	72	These are all being checked as part of the unmetered load data cleanse. 47 of these are unmetered BTS supplies.
Contact’s load value is different to that of their load description	52	29 ICPs were incorrect and have been corrected (24 of these related to the incorrect loading of unmetered BTS supplies). Five had the incorrect load description - these were corrected. The remaining 18 ICPs are being investigated.
Distributor’s unmetered field is populated but the retailer field is not populated	1	ICP 0007188677RN105 was an unmetered BTS. The unmetered BTS was removed and the unmetered load was end dated and it end dated all unmetered load. This has been corrected. This relates to shared unmetered load and is discussed in section 5.1 .
Unmetered flag = Y but daily unmetered kWh = 0	1	One ICP (0000626370WP114) was found where the distributor has unmetered load details and no unmetered load populated by Contact.

I rechecked the unmetered discrepancies from the 2019 audit report and found all were cleared except for the ICPs detailed below where Contact believes their unmetered load details to be correct in all

instances and have requested the customer to confirm their load in relation to this for eight of the ten ICPs where a difference remains between. Some of these are also included in the table above.

ICP	Distributor unmetered load details	Trader unmetered load details	Trader kWh	Distrib kWh ¹	2019 Comments	2020 Comments
0000033447CHA27	0002;24;SPEED INDICATOR DEVICE	0.2KW;24HRS;200 W SPEED INDICATOR SIGN	4.75	0.05	Distributor has the incorrect value recorded.	Confirmation of unmetered load requested from customer, but Contact believe that Distributor has the incorrect value.
0000033686CHB8A	0002;24;SPEED INDICATOR DEVICE	0.2KW;24HRS;200 W SPEED INDICATOR SIGN	4.75	0.05	Distributor has the incorrect value recorded.	Confirmation of unmetered load requested from customer, but Contact believe that Distributor has the incorrect value.
0000033687CH7CF	0002;24;SPEED INDICATOR DEVICE	0.2KW;24HRS;200 W SPEED INDICATOR SIGN	4.75	0.05	Distributor has the incorrect value recorded.	Confirmation of unmetered load requested from customer, but Contact believe that Distributor has the incorrect value.
0000033688CH811	0002;24;SPEED INDICATOR DEVICE	0.2KW;24HRS;200 W SPEED INDICATOR SIGN	4.75	0.05	Distributor has the incorrect value recorded.	Confirmation of unmetered load requested from customer, but Contact believe that Distributor has the incorrect value.
0000033689CH454	0002;24;SPEED INDICATOR DEVICE	0.2KW;24HRS;200 W SPEED INDICATOR SIGN	4.75	0.05	Distributor has the incorrect value recorded.	Confirmation of unmetered load requested from customer, but Contact believe that Distributor has the incorrect value.
0000033690CHOA8	0002;24;SPEED INDICATOR DEVICE	0.2KW;24HRS;200 W SPEED INDICATOR SIGN	4.75	0.05	Distributor has the incorrect value recorded.	Confirmation of unmetered load requested from customer, but Contact believe that Distributor

¹ Calculated based on the distributor unmetered load details

ICP	Distributor unmetered load details	Trader unmetered load details	Trader kWh	Distrib kWh ¹	2019 Comments	2020 Comments
						has the incorrect value.
0000552757HB3CE	0125;12;Lighting	1xU01 125;11.7 1x 125 HPL mercury lamp	1.29	0.164	Registry update failed to load.	Confirmation of unmetered load requested from customer.
0000617890TPE23	0120;04.0;Monitoring station	0120;24.0: River Monitoring station	2.8	0.48	Contact believe their hours of operation to be correct.	Contact believe their hours of operation to be correct and have requested confirmation of unmetered load from customer.
1001139248LCD52	0.05kW;24:VECT Auto Gate	0050;1 Domestic Ac/Solar gate 50w x5 operations	0.05	1.20	Contact believe their hours of operation to be correct.	Vector has recorded the hours of availability not operation. Contact's calculation is correct.
0000541168TUF0B	UNDER VARANDAH TAURANGA - 115W-24HR	115W;12H;UNDE RVERANDAH	1.38	2.76	These are under verandah lights and Contact believe their hours of operation to be correct. Google maps indicates these lights are not on 24 hours a day.	No change – Distributor hours of operation are incorrect.

Standard unmetered load corrections are able to be processed in SAP and will flow through to reconciliation submissions. The correction process is discussed in **sections 2.1** and **8.1**.

CTCX and CTCS

Any new unmetered load or changes to existing unmetered load will be identified through the validation checks described in **section 2.1**.

CTCX has two unmetered residual load ICPs. These were confirmed to be compliant.

CTCS has three unmetered load ICPs. All were checked and confirmed to be compliant. ICP 0643083001PC099 has an unmetered load between 3-600 kWh p.a. This is of an approved load type and is also discussed in **section 5.2**.

Some DUML ICPs have switched into CTCS and more are expected to switch in. This is discussed in **section 5.4**.

There have been no changes to these since they switched into the respective codes.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.7</p> <p>With: Clause 9(1)(f) of Schedule 11.1</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>Daily unmetered kWh values are incorrect for 37 ICPs on the registry and five ICPs with the incorrect unmetered load description recorded.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate as the processes to monitor changes identify changes and historic unmetered loads are now being verified.</p> <p>The audit risk rating is low, because reconciliation is occurring correctly.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>We have updated the ICPs that we believe are correct, and continue to make enquires with site owners where an owner is identified. We have since made 24 enquires confirming a site's current unmetered load values and/or if the unmetered site is required across a variety of unmetered sites and uses.</p> <p>Contact applies the same process for both standard and shared unmetered load where we undertake monthly and weekly validations of distributor details with our unmetered load values used for submission. In addition, our SAP system generates an exception (BPEM) whenever a new ICP switches to Contact with the distributor's UNM details field populated or where, for an existing ICP, SAP detects a change in the distributors UNM details via a registry event update.</p> <p>All unmetered load corrections now align with the date of the actual change as reported by network and or discovered as a result of other work.</p>		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Contact have identified historical validation issues in relation to historic sites and are undertaking a cleanup work programme to correct historical unmetered loads both on its own database and on the registry.</p> <p>The key objectives of the cleanup work programme will be to try to gather new information about any changes that may have occurred for historical unmetered loads and establish if they are to</p>		Ongoing	

<p>remain active or should be identified as not working / inactive, and or decommissioned and unmetered load removed.</p> <p>A future work programme will include the requirement that better and more detailed information must be provided (on proposed loads) by the customer or their agent.</p>		
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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 1 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**.

CTCT

The reconnection process was examined. The registry list file as at 9/04/20 and audit compliance report for 01/05/19 to 9/04/20 were reviewed to determine compliance.

- 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.

CTCX and CTCs

The reconnection process was examined. The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to determine compliance. No new connections or reconnections have occurred during the audit period.

Audit commentary

CTCT

The status of an ICP is only changed to “active” once confirmation has been received by a contractor. Submission information is provided for all “active” ICPs.

Before being given an “active” status the trader is required to ensure that the ICP has only one customer, embedded generator, or direct purchaser; and that the electricity consumed is quantified by a metering installation(s) or other Authority approved method of calculation. SAP will not allow more

than one party per ICP nor will it allow an ICP to be set up without either a meter or if it is unmetered, the daily kWh.

Contact reinstated their discrepancy reporting in January 2020, that identifies any ICPs that have an initial electrical connection date populated but the ICP is still at the “ready” status and date discrepancies. This is checked daily.

Accuracy of status updates

As described in detail in **section 3.5**, the AC020 report identified 102 ICPs with date discrepancies and a diverse sample of 40 ICPs were checked to confirm the correct active date. 24 of the ICPs had an incorrect active date recorded and were being corrected. These are detailed in **section 3.5**.

As detailed in **section 2.9**, two ICPs with no metering recorded and no unmetered load recorded were found to have been in the incorrect status. This is recorded as non-compliance.

CTCX and CTCS

Simply Energy manage “active” statuses as an agent, using the same processes as the existing trader codes that they manage.

Simply Energy change the status of an ICP to “active” once confirmation has been received from a contractor. The status is then updated on the registry using the web interface.

Before being given an “active” status the trader is required to ensure that the ICP has only one customer, embedded generator, or direct purchaser; and that the electricity consumed is quantified by a metering installation(s) or other Authority approved method of calculation. Salesforce will not allow more than one party per ICP nor will it allow an ICP to become “active” without either a meter or a dummy meter (for unmetered load).

Simply Energy’s processes are compliant. I confirmed that no new connections or reconnections have occurred for CTCX or CTCS since trading commenced.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 3.8</p> <p>With: Clause 17 Schedule 11.1</p> <p>From: 27-Dec-18</p> <p>To: 17-Apr-19</p>	<p>CTCT</p> <p>Some incorrect Active dates.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are rated as moderate as the discrepancy reporting has been reinstated but some errors still occur.</p> <p>The audit risk rating is low, as the number of ICPs affected is small.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
Contact has made process changes and revamped its reporting to identify any discrepancies. We have made system logic changes to pick up the variances much earlier in the process. We are continuously working with Distributors, MEPs and our field contractors to resolve date variances between Active status event, IED and certification dates.	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Ongoing reporting is in place to resolve discrepancies.	Ongoing	

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

CTCT

The disconnection process was discussed. The event detail report for 1/05/19 to 9/04/20 was analysed to identify all disconnections during the period.

The process to manage ICPs at the other inactive statuses was examined. A diverse sample of 20 of these status updates to inactive were checked for accuracy.

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

Findings on the timeliness of inactive status updates are recorded in **section 3.3**.

CTCX and CTCX

The disconnection process was discussed. The event detail report for 1/06/19 to 3/05/20 was analysed to identify all disconnections during the period.

The process to manage ICPs at the other inactive statuses was examined. No inactive status changes were identified in the event detail reports.

Findings on the timeliness of inactive status updates are recorded in **section 3.3**.

Audit commentary

CTCT

Management of inactive status

The status of “Inactive” is only used once a Contact approved contractor has confirmed that the ICP has been disconnected. This process is automated with the exception of ICPs to be made “Inactive - ready

for decommissioning”. The timeliness of these updates is detailed in **section 3.3**. Contact continues to read all disconnected ICPs to identify unauthorised reconnections and incorrect statuses. Credit disconnections are now correctly recorded in the registry.

The samples checked of updates to inactive confirmed that the correct statuses and dates were applied except for ICP 0000011605TR636 which was recorded as “inactive- vacant” (1,4) status but this was an AMI remote disconnection (1,7). This has been corrected on the registry.

I confirmed that the status has been corrected for ICP 0000632467TP11F found in the 2019 audit.

The audit compliance report identified 264 ICPs that have been recorded as AMI-remote disconnection, but AMI is not indicated. A typical sample of 20 ICPs were checked and found that all except one were updated to AMI non-communicating post the disconnection date. ICP 0000716660TE574 was recorded as an AMI remote disconnection but there is no AMI meter on site. This has been corrected to the “disconnected vacant” status.

The streetlight audit for NZTA Waimakariri identified that ICP 0000366150MP46C (Ohoka Downs community lighting) was electrically connected from at least 22/08/17. This was corrected in July 2019 but was moved to electrically disconnected again from 28/08/19. Veritek and Mainpower have confirmed that the lights are burning and it maybe that one light has been disconnected on 28/08/19 but the ICP was disconnected in error rather than the streetlight load adjusted. This is recorded as non-compliance below.

Inactive - new connection in progress

Contact does not use this status for the new connection process as part of the BAU new connection process.

Monitoring of consumption on ICPs with inactive status

BPEMs are generated for the assurance team when consumption occurs on an inactive site. A robot initially validates the consumption to determine whether it is likely to be genuine, then it is reviewed by a user who will correct the status, add disconnection and reconnection reads and/or invalidate misreads as necessary.

Contact also maintains a report of inactive sites with consumption, which is refreshed every month. Contact’s reconciliation team uses this report to identify ICPs with consumption during periods with inactive status which have not already been corrected through the BPEM process. Depending on the volume of consumption, a correction is processed by either:

1. correcting the ICP to the “active” status from the day before consumption was detected with a reconnection read which matches the disconnection read, or
2. adding the inactive consumption to an existing reconciliation period record which allows the change to be independent of billing to the customer.

Contact provided a report of inactive ICPs with consumption recorded. The report contained 690 ICPs, and comments indicated that all of the ICPs with inactive consumption had been investigated. The inactive consumption still to be resolved at the time the report was run totalled 26,427 kWh, a significant reduction from 139,807 kWh during the 2019 audit and 124,345 kWh during the 2018 audit.

- 625 exceptions were resolved by updating missing, incorrect, or estimated disconnection or reconnection reads, and correcting the ICP status. I checked a diverse sample of ten corrections with different causes of inactive consumption, and confirmed that the volumes correctly flowed into reconciliation submissions or that the inactive consumption was caused by a misread.
- 28 exceptions (15,120 kWh) had two settlement unit time slices ending on the same day, with one active and one inactive. SAP’s process was applying the inactive unit. An SAP analyst has resolved the exceptions, and is investigating the root cause to prevent recurrence of the issue.

- 37 exceptions (11,307 kWh) were indicated to be under investigation. 28 ICPs had an Arc meter with an AMI logger or controller wired downstream of the meter, which results in a small amount of energy required to keep the logger or controller electrically connected being recorded by the meter although the supply into the installation is disconnected. Contact has been working with Arc to find a solution and intends to disconnect the ICPs at the pole to stop any energy being consumed, and move the ICPs to submission type NHH. They intend to return the ICPs to active status for one day to allow the load to be recorded. I checked the other seven ICPs with inactive consumption over 300 kWh, and found it occurred because disconnection and reconnection reads had not been entered correctly due to user training issues, or settlement units had not been updated correctly. I confirmed that corrections were processed for all the affected ICPs.

The 2019 audit found ICP 0000246174TP7F1 had inactive consumption added to an inactive period and the volume was excluded from submissions. I confirmed that a correction has now been processed and revised data submitted.

Consumption for active vacant ICPs is included in the relevant submission files, as discussed in **section 12.2**.

CTCX and CTCs

Management of inactive status

Simply Energy manages the “inactive” statuses as an agent, using the same processes as the existing trader codes that they manage.

Simply Energy change the status of an ICP to “inactive” once confirmation has been received from a contractor. The status is updated on the registry using the web interface.

An end date is entered in DataHub and MADRAS when ICPs are disconnected, and an import error will be created for any reads received after disconnection. Simply Energy reviews any reads received after the end date and takes corrective action if consumption while disconnected is identified. This includes confirming whether the consumption is genuine and updating the ICP status and data stream dates if necessary.

Simply Energy request that Wells stop manually reading meters once they become disconnected, but do not routinely ask the MEPs to stop reading ICPs. I note that reads are often unable to be obtained by the MEPs where the meter is disconnected.

Simply Energy’s processes are compliant. There have been no changes to inactive during the audit period and all ICPs have an active status.

Inactive - new connection in progress

Simply Energy does use the “inactive - new connection in progress status”. The MEP nomination is sent at the same time. There have been no new connections completed during the audit period.

Monitoring of consumption on ICPs with inactive status

An end date is entered in DataHub and MADRAS when ICPs are disconnected, and an import error will be created for any reads received after disconnection. Simply Energy reviews any reads received after the end date and takes corrective action if consumption while disconnected is identified. This includes confirming whether the consumption is genuine and updating the ICP status and data stream dates if necessary. No examples of inactive ICPs with consumption were identified.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.9</p> <p>With: Clause 19 of schedule 11.1</p> <p>From: 28-Aug-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>ICP 0000366150MP46C incorrectly recorded as disconnected on the registry but is active.</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>Strong controls are in place for the identification and management of discrepancies and the historic issues regarding consumption on inactive ICPs are being worked through.</p> <p>The number of ICPs affected is small, therefore the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>Consumption detected on inactive ICPs</u></p> <p>Contact continues to improve its controls around the management of inactive consumption which can be seen by the reduced volume of consumption identified. This improved monitoring is also enabling refresher training to users where human error was involved.</p> <p>We continue to engage with other traders where we detect an ICP being reconnected prior to the switch date in order improve the behaviour around this process between participants. For the period this audit covers we identified 225 instances where this scenario has occurred.</p> <p>Investigation confirmed that incorrect streetlights were disconnected by CTCT in error due to incorrect address information on the Registry.</p> <p>A new request was raised to MPOW to reconnect Bradley Road lights for Waimakiriri District Council.</p> <p>CTCT has reactivated ICP 0000366150MP46C in SAP and Registry, ensuring the load is correctly included in energy submission data.</p> <p>We have ensured that SAP has been updated to include all 22 HPS 70W lights which have been identified as connected to this street lighting circuit.</p> <p>CTCT's 14 Month washup for the September 2019 period to include all of CTCT's under submitted volume from 22/8/2017 to 31/7/2019. Correct monthly volumes will be submitted going forward from 1/8/2020.</p>		1/10/2021	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>MPOW has corrected the Registry address information for Ohoka Downs streetlights ICP using their GIS information available.</p> <p>Establishment of a QA process to review correct instructions are issued for any future Service Order to disconnect DUML streetlights. This should include streetlight address and pole number references.</p>	31/12/2020	

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 the process in place to manage and respond to such requests.

I analysed a registry list of ICPs with "new" or "ready" status and Contact as the proposed trader, and reviewed processes to monitor new connections.

Audit commentary

The process is that any requests received from Distributors are expected to be actioned. Some Distributors have advised that requests sent to follow up on ICPs that have been ready for 24 months or more are not always responded to.

As detailed in **section 2.9**, a weekly check is run to identify any ICPs where Contact is nominated but no customer exists in SAP. This looks at new ICPs and not historical ICPs. Any ICPs identified are to be investigated to determine the next action on a case by case basis. This process appears to have lapsed as is evident in the ICP 0000016043EA585 not being claimed until it was investigated as part of this audit.

Analysis of the registry list found 211 ICPs at the "New" and "Ready" statuses for two years or more. These are detailed in the table below by status and network:

Network	Count of ICP
ALPE	6
CKHK	2
COUP	10
DUNE	27
EASH	1
ELEC	2
ELIN	2
HAWK	36

Network	Count of ICP
MOPO	2
MPOW	6
NPOW	4
OTPO	1
PPNZ	1
TOPE	36
TPCO	12
UNET	11
VECT	25
WAIK	26
WAIP	1
Grand Total	211

This is an increase from the 174 ICPs recorded in the last audit. I checked a sample of 20 ICPs with the “ready” status and Contact advised that 12 of these were no longer required. Contact has no customer registered for the remaining eight ICPs. I recommend that this process is reviewed.

Description	Recommendation	Audited party comment	Remedial action
ICPs at new or ready status for greater than 24 months	CTCT Review the process in place to confirm ICPs where Contact is the nominated trader are still required after 24 months.	Any requests received from Distributors are considered and responses/acknowledgements are returned to them accordingly. In some instances, customer confirmation is required prior to providing the approval to decommission the ICP which can cause a delay. Contact will consider the recommendations made by auditors to improve this process.	Investigating

CTCX and CTCS

New connections are monitored on the Salesforce dashboard for each trader code, as described in **section 2.1**. The “Inactive - new connection in progress” is used for new connections. Workflows are used to manage the new connections process. Open jobs are monitored, and the registry is updated as soon as paperwork is received. Late paperwork is followed up.

Simply Energy have received requests for other codes they manage from Vector and WEL Network requesting information on ICPs which have been at “new” or “ready” status for more than two years and these are responded to. There have been no such requests received for CTCS or CTCX.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The switch gain process was examined to determine when Contact 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

CTCT

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

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

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 the 14,985 transfer ICPs where this information was available on the PR255 report and found none had metering categories of three or above.

CTCX and CTCS

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

Transfer switch type are applied where a customer is transferring between retailers at an address. This information is collected as part of the customer application process which is carried out by Contact and then passed to Simply Energy.

CTCX	Six NT files were issued for transfer switches, and none had metering categories of three or above. The five NT files checked were sent within two business days of pre-conditions being cleared, and the correct switch type was selected.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 confirmed no transfer NT files were issued.

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 may disregard every event date established by the losing trader for an ICP for which when the losing trader received notice from the registry manager under clause 22(a) the losing trader had been responsible for less than 2 months.

Audit observation

The event detail report was reviewed to:

- identify AN files issued by Contact during the audit period,
- assess compliance with the requirement to meet the setting of event dates requirement, and
- a diverse sample ANs were checked for each trader code to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

CTCT

AN timeliness

The AN responses are automated with the breach report checked twice daily to ensure that all ANs have been sent as expected. Any exceptions are manually processed. The switch breach report did not record any late AN files.

AN content

SAP determines the AN code based on a hierarchy.

The switching process was examined in relation to Contact as the “losing trader” for a diverse sample of 15 NHH ICPs, including at least two ICPs which had each AN response code applied. All were found to be correct except for the two of three “MU” coded ICPs. This will occur if the metering hasn’t been loaded to the ICP at the time of the AN being sent. This was the case in both instances. There was a total of 54 AN files sent with the “MU” code identified in the event detail report. I checked a further sample of ten ICPs. One of these were incorrectly recorded as AN code “MU”.

The event detail report was reviewed for all 22,826 transfer ANs to assess compliance with the setting of event dates requirements.

- 22,694 (99.4%) had a proposed event date within five business days of the NT receipt date.
- All ICPs (22,826) had proposed event dates within ten business days of the NT receipt date.

CTCX and CTCX

There have been no switch losses for CTCX and one switch loss for CTCX since commenced trading commenced. No AN was issued.

AN timeliness

The timeliness of AN files is monitored using the switch breach report.

CTCX	No breaches were recorded on the switch breach report.
CTCS	No breaches were recorded on the switch breach report.

AN content

The process to determine AN codes is automated. The AD (advanced metering) is applied if an AMI meter is present, and AA (accept and acknowledge) is applied if AMI metering is not present. I repeat the recommendation that Simply Energy review the AN code hierarchy and add the following codes so that they are applied in preference to AA to ensure future compliance:

- CO (contracted customer),
- MP (metering is pre-paid),
- MU (unmetered supply), and
- OC (occupied premises) codes

Description	Recommendation	Audited party comment	Remedial action
AN response code hierarchy	CTCS/CTCX Consider adding the MU (unmetered supply) and OC (occupied premises) codes to the AN code hierarchy to ensure that AA (accept and acknowledge) is only used when no other codes are applicable.	The change to incorporate MU (unmetered supply) has been developed and will be tested and deployed by 11 September 2020.	Identified

Simply Energy apply the gaining trader’s requested date and ensure that all event dates are no more than 10 business days after notification, and at least 50% of event dates are no more than five business days after notification.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 confirmed no AN files were issued.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 confirmed no AN files were issued.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.2</p> <p>With: Clause 3(a)(ii) of schedule 11.3</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>“MU” AN code incorrectly being sent when metering is not loaded at the time of the AN being sent.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate as SAP assigns the AN code based on a hierarchy but if metering is not loaded at the time of the loss SAP will incorrectly apply the MU code.</p> <p>The audit risk rating is low as this has no direct impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>CTCT</p> <p>Contact believes that there is a robust structure in place for the AN codes in SAP. The issue found for a couple of ICPs with 'MU' code being sent to registry were due to timeliness as metering data was not setup yet from recent switch gain.</p> <p>Contact will review SAP logic for sending ANs. Depending upon the outcome of this investigation, a potential fix may be deployed.</p>		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Contact will review SAP logic for sending ANs. Depending upon the outcome of this investigation, a potential fix may be deployed.		Ongoing	

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 Contact during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of records per trader code. 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

CTCT

CS timeliness

Contact has reporting in place that is run twice daily and this is monitored closely to ensure CS files are sent on time.

The switch breach history report contained 160 E2 breaches for late transfer CS files. I rechecked all the breaches and found only one that was genuinely late. This was due to human error.

CS content

The registry functional specification requires estimated daily kWh to be based on the average daily consumption for the last read to read period. From March 2020, Contact calculates the average daily consumption using the two most recent validated actual reads captured for each ICP meter register. The sum of this consumption is then aggregated to an ICP level and then divided by the number of days between reads to calculate a daily average at metering installation level. This methodology complies with the functional specification.

Analysis of the estimated daily kWh on the event detail report identified:

Count of transfer CS files	Estimated daily kWh
Negative	-
Zero	750

Count of transfer CS files	Estimated daily kWh
More than 200 kWh	203

A sample of ten of these ICPs were checked (five with zero and the five highest with more than 200 kWh).

- The five ICPs with a zero average daily consumption were found to be incorrect for all but one ICP. These were due to the issue identified in the 2018 audit that found when an ICP switches in and out in a short period the daily consumption figure in SAP has not always refreshed and therefore zero consumption is recorded when there is consumption. A fix for this issue was put in place in March 2020.
- The five ICPs with the highest average daily consumption were found to be incorrect due to implausible reads being recorded at the time of CS files being sent. Implausible reads are not considered in the revised average daily consumption calculations deployed in March 2020.

The accuracy of the content of eight CS files was checked.

- The average daily consumption was calculated incorrectly for seven of the eight of ICPs sampled. This was due to the way the average daily consumption was calculated at the time these were sent. A fix was put in in March 2020 and the average daily consumption is now calculated from the last two validated reads where these are available. I reviewed the logic for the different scenarios, and it complies with the code requirements. I checked five examples post the fix being put in place and confirmed it is working as expected.
- The reads were incorrectly labelled as estimates for ICP 0000001367NT0F7. They were actual reads for the switch event date. This is being investigated.
- ICP 0000217183MPA9B was sent with an incorrect last read date. This was due the last read date being incorrectly populated as a result of the meter being removed and reinstalled on an ICP. This was due to human error.
- SAP sent the incorrect last read date for ICP 0321943651LC541. The switch event date was 13/08/19. The site is an AMI site and the actual read for midnight of 12/08/19 was sent but was labelled incorrectly as 13/08/19. This issue was fixed in March 2020.

CTCX and CTCS

There have been no changes to Simply Energy's processes since the material change audit.

CS timeliness

The timeliness of CS files is monitored using the switch breach report.

CTCX	No breaches were recorded on the switch breach report.
CTCS	No breaches were recorded on the switch breach report.

CS content

CS files are created using an ETL (extract, transform, load process) from information contained in Salesforce and DataHub.

Average daily consumption is calculated in DataHub as the consumption between the most recent validated read and the previous validated read, where the previous validated read is at least 21 days before the most recent validated read. If there is insufficient history to calculate the average daily consumption using readings, it will be estimated at 55 kWh per day. These values are noted as Forward Estimate Daily kWh in Sales Force. In the switch loss process this estimated value is manually copied to the Average Daily kWh field for inclusion in the CS file. If left blank, the CS file is populated with average daily consumption of zero.

The registry functional specification requires estimated daily kWh to be based on the average daily consumption for the last read to read period. Where the last read to read period is less than 21 days, the average daily consumption recorded will not be calculated according to the registry functional specification. The Authority's audit update memo on 18/06/19 explained that the average daily consumption calculation may change as part of the switch process review, which is due to be completed in 2020 or 2021. This has occurred for the one CTCX switch loss process detailed below. A fix is in progress, but I have repeated the recommendation to maintain visibility.

Description	Recommendation	Audited party comment	Remedial action
CS estimated daily kWh	CTCS/ CTCX Consider reviewing the estimated daily consumption calculation to ensure compliance with the registry functional specification.	A new process has been developed and tested and is now ready for deployment. From 3 September 2020 we will be compliant.	Identified

CTCX	No CS files were issued for transfer switches.
CTCS	No CS files with average daily kWh that was negative, zero, or over 200 kWh were identified. One CS file was issued for a transfer switch, all the information was correct except for the average daily consumption figure. This defaulted to 55 units a day but the site was an AMI site and is reconciled HHR so the average daily consumption should be calculated based on the average of the last two validated read.

CTCS

No breaches were recorded on the switch breach report.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.3 With: Clause 5 Schedule 11.3	CTCT One late CS file. The average daily consumption calculation was not calculated from the validated read to read period until March 2020. Some incorrect last read dates provided. One instance of the an actual read for the event date sent as an estimate read. CTCS The average daily consumption calculation was not calculated from the validated read to read period. Potential impact: Low Actual impact: Low

From: 01-Jun-19 To: 31-May-20	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 overall, but I note that Simply Energy's current average daily consumption calculation will not achieve compliance for short periods of supply. 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
CTCT <u>One late CS file</u> This was identified as a one-off operator error. Further training has been provided to prevent this issue in the future. <u>Average daily consumption</u> As noted, system enhancement was deployed in March 2020 to resolve this non-compliance. We are continuously working with our IT team to further improve our system logic to account for different scenarios. <u>Some incorrect last read dates provided</u> Fix for ICP 0321943651LC541 was deployed in late August 2019, not March 2020. No further re-occurrence of this error has been identified. Error on ICP 0000217183MPA9B was a user error and further training has been provided to the operator to prevent this issue from re-occurring in the future. <u>One instance of an actual read for the event date sent as an estimate read</u> Contact has raised relevant IT ticket to investigate this issue. Depending upon the outcome of this investigation, we anticipate a fix will be deployed. CTCS/CTCX We have identified the issue now and have added a different process to enable compliance.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
CTCT Contact has provided further training to operators and continuously working alongside our IT team to further enhance system logics which will resolve these non-compliances.		Ongoing	

CTCS/CTCX		
A new process has been developed and tested and is now ready for deployment, from 3 September 2020 we will be compliant.		

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within 4 calendar months of the registry manager giving the gaining trader written notice of having received information about the switch completion, 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 RR and AC files issued for transfer switches were checked to confirm that the content was correct, and that Contact's systems 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 Contact's systems.

The switch breach report for the audit period was reviewed.

Audit commentary

CTCT

Timeliness of RR and AC files

If a discrepancy is detected with the switch in reads, two reads are attempted to be gained as soon as possible and these are then sent through to the losing trader.

The switch breach report recorded 53 late RRs for transfer switches, 45 of those were genuine. The ten latest files were checked and found in all instances these were delayed due to not being able to gain to actual reads or there was negotiation required with the losing trader before the read request was

accepted causing this to be outside the four-month window. Whilst these are technically late Contact are compliant with the requirement to provide complete and accurate information.

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

Content and handling of RR and AC files

In cases where Contact is the gaining trader and they dispute the switch meter reading because the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more, a control read is requested. If two actual reads confirm an RR is required, the billing team emails the other retailer using the switching inbox (so the switching team has a copy of the correspondence) and issues the RR. When the AC comes back the billing team processes the RR acceptance by updating the reads in SAP. If the AC is a rejection it is directed back to the switching team for action. Contact attempt to complete this within four months as required by this clause.

Contact issued 298 RR files for transfer switches. 227 were accepted and 71 were rejected. For the sample of five acceptances and five rejections checked there was a genuine reason for Contact's RRs, they were supported by at least two validated readings, and the reads recorded in Contact's system reflected the outcome of the RR process.

Contact issued 541 AC files for transfer switches. 296 were accepted and 245 were rejected. A sample of five AC rejections and five acceptances were checked. All were rejected for valid reasons. SAP reflected the correct outcome of the RR process.

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

CTCX and CTCS

Timeliness of RR and AC files

Read changes are tracked using the Salesforce dashboard.

CTCX	No breaches were recorded on the switch breach report.
CTCS	No breaches were recorded on the switch breach report.

Content of RR and AC files

In cases where CTCS or CTCX is the gaining trader and they dispute the switch meter reading because the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more, Simply Energy attempt to negotiate a changed switch meter reading which is supported by validated meter readings.

Advanced meters which have switched in on an estimate reading are checked against AMI data to determine whether a read change is required. Other read changes are identified through the read validation processes discussed in **section 9.5**.

Read changes are processed manually, and Datahub will be manually updated to ensure that it reflects the outcome of the read renegotiation process.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 for CTCX confirmed no RR or AC files were issued. Review of five transfer CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in CTCX's systems.
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CTCS	<p>Review of the event detail report for 01/03/20 to 29/04/20 for CTCS confirmed no RR or AC files were issued.</p> <p>There were no incoming transfer CS files with estimated reads.</p>
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Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.4</p> <p>With: Clause 6(1) and 6A Schedule 11.3</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>45 late RR files.</p> <p>Potential impact: Medium</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 rated as strong with good visibility of ICPs requiring RRs.</p> <p>The impact on settlement is minor because the number of ICPs is low; therefore, the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has good process in place for ICPs requiring RRs however some delays are unavoidable (i.e. access issues to read the meters). We are continuously making improvements to reduce these non-compliances.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As above.		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

CTCT

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

Contact did not issue any read change requests where clause 6(2) and (3) of schedule 11.3 applied.

I identified 218 RR files issued to Contact within five business days of CS completion where the NT specified an HHR profile. All were accepted, or validly rejected because the CS file contained actual readings and/or Contact had also traded the ICP as HHR, except for ICPs 0000222748WEF41 and 0000591030WEEE8. Contact sent the CS files as estimates and the gaining HHR trader supplied Contact with actual reads within five business days. These should have been accepted; and resulted in the gaining trader submitting 3,063 kWh more than their gain reads. This is recorded as non-compliance

CTCX and CTCS

Simply Energy is aware of the requirements of Clause 6(2) and (3) of Schedule 11.3 and has processes in place to ensure compliance.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 for CTCX confirmed no RR or AC files were issued.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 for CTCS confirmed no RR or AC files were issued.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.5</p> <p>With: Clause 6(2) and (3) Schedule 11.3</p> <p>From: 15-Aug-19</p> <p>To: 29-Aug-19</p>	<p>CTCT</p> <p>2 RR requests incorrectly rejected resulting in the gaining trader submitting 3,063 kWh more than their gain reads.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate as Contact's expectation that an email accompany all RR requests is outside of the code requirements and therefore RRs may be rejected incorrectly.</p> <p>The audit risk rating is assessed to be low but I note that this has the potential to be a medium impact if the volumes were larger and the impact on smaller traders is that they have to buy volume that can't be billed on their customer, and the volumes will be submitted for the wrong period.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has reviewed its processes to improve management of ACs. Further training has been provided to the users to ensure this does not re-occur.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Contact provides ongoing coaching as required.		Ongoing	

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

Audit commentary

Contact 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 Contact 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

CTCT

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

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

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

I checked the metering category for the 38,805 switch move ICPs where this information was available on the PR255, and found none had metering categories of three or above.

CTCX and CTCS

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

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

CTCX	47 NT files were issued for switch moves, and none had metering categories of three or above. The five NT files checked were sent within two business days of pre-conditions being cleared, and the correct switch type was selected.
CTCS	Review of the event detail reports for 01/03/20 to 29/04/20 for CTCS confirmed 70 switch move NT files were issued. All had a metering category of 1, 2 or 9. The five NT files checked were sent within two business days of pre-conditions being cleared, and the correct switch type was selected.

I note that DUML ICPs (detailed in **section 5.4**) have switched into CTCS post the provision of the event detail report. The three ICPs concerned have switched in using switch move. This is done so that the

ICP can be gained for the correct date but is not compliant with this clause. This is recorded as non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.7 With: Clause 9 of Schedule 11.3 From: 01-Jun-20 To: 01-Jun-20	CTCS Incorrect switch type used for 3 DUML ICPs switching in. Potential impact: None Actual impact: None Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong as the controls to determine the correct switch type are robust. The MI switch type is used so that Contact gains the customer for the correct contract start date. The audit risk rating is low as this has no impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
The 3 ICPs were part of the mass switch over on 1 June 2020. If the ICPs had been switched using the correct type the switch date may have been different.		01/09/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Working with other traders when doing mass switch overs to confirm that they will release on the correct date.		01/09/2020	

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

- 10(1)(a) If the losing trader accepts the event date proposed by the gaining trader, the losing trader must complete the switch by providing to the registry manager:
 - o confirmation of the switch event date; and
 - o a valid switch response code; and
 - o final information as required under clause 11; or

- 10(1)(b) *If the losing trader does not accept the event date proposed by the gaining trader, the losing trader must acknowledge the switch request to the registry manager and determine a different event date that—*
 - *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 Contact during the audit period,
- assess compliance with the requirement to meet the setting of event dates requirement, and
- check a diverse sample ANs for each trader code to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

CTCT

AN and CS timeliness

Contact has reporting in place that is run twice daily and this is monitored closely to ensure AN and CS files are sent on time.

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

The switch breach report contained 1,706 E2 breaches for late switch move CS files. I recalculated the days overdue for the 1,531 breaches which had NT files on the event detail report and/or were more than 30 days late. I found 26 breaches appeared genuine, none of which were more than three business days late. I and checked a sample of the seven latest updates, including all those over one business day late and found six of the ten were sent late. These were sent late due to information needing to be corrected in SAP. ICP 0000035701UNBAD was confirmed to be compliant as Contact had set a different event date that was within ten business days of the NT receipt date.

AN content

SAP determines the AN code based on a hierarchy.

The switching process was examined in relation to Contact as the “losing trader” for a diverse sample of 15 NHH ICPs, including at least two ICPs which had each AN response code applied. In all cases, the correct codes were used.

The event detail report was reviewed for all 48,348 switch move ANs to assess compliance with the setting of event dates requirements.

- 48,336 (99.97%) had proposed event dates within ten business days of the NT receipt date. 12 ICPs had event dates more than ten business days after the NT receipt date, which matched the gaining trader’s requested transfer date.
- No ANs has a proposed event date before the gaining trader’s requested date.

CTCX and CTCX

AN and CS timeliness

The timeliness of AN and CS files are monitored using the switch breach report.

CTCX	No breaches were recorded on the switch breach report.
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CTCS	No breaches were recorded on the switch breach report.
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AN content

The AN process to determine the AN code is automated and is described in **section 4.2**.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 confirmed no AN files were issued.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 confirmed no AN files were issued but an AN should have been issued for ICP 0202735885LCEA0. The CS file was issued directly from the NT receipt. This was due to a misunderstanding and Simply Energy intend to send an AN for all future switch moves.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.8</p> <p>With: Clause 10(1) of Schedule 11.3</p> <p>From: 05-Jun-19</p> <p>To: 01-Apr-20</p>	<p>CTCT</p> <p>A small number of late CS files sent.</p> <p>CTCS</p> <p>No AN sent for one ICP.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating:2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate as whilst Contact's processes are automated, Simply Energy's process is manual.</p> <p>The audit risk rating is low as the small number of late files were only a few days late and this will have no material impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>CTCT</p> <p>Contact is reviewing the process to reduce these non-compliances. As the auditor has noted, late CS files were due to data fix required. Contact strives to overcome this through further training and will investigate additional exception reporting.</p>		Ongoing	Identified

CTCS Processes have already been updated so that AN files are sent for all NT move ins.		
Preventative actions taken to ensure no further issues will occur	Completion date	
CTCT Ongoing coaching and reporting as required.	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, then within 10 business days of receiving notice the losing trader must also complete the switch by providing to the registry manager as described in subclause (1)(a):

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

Audit observation

The event detail report was reviewed to identify AN files issued by Contact during the audit period, and assess compliance with the requirement to meet the setting of event dates requirement.

Audit commentary

CTCT

Analysis found all switch move ANs had a valid switch response code, and event dates were compliant. Switches were completed as required by this clause.

CTCS and CTCX

Review of the event detail reports for 01/09/19 to 01/05/20 for CTCX and 01/03/20 to 29/04/20 for CTCS confirmed no AN files were issued. This is recorded as non-compliance in **section 4.8** for the one switch move loss.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The event detail report was reviewed to identify CS files issued by Contact during the audit period. The accuracy of the content of CS files was confirmed by checking a sample of records per trader code. 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

CTCT

CS content

The registry functional specification requires estimated daily kWh to be based on the average daily consumption for the last read to read period. From March 2020, Contact calculates the average daily consumption using the two most recent validated actual reads captured for each ICP meter register. The sum of this consumption is then aggregated to an ICP level and then divided by the number of days between reads to calculate a daily average at metering installation level. This methodology complies with the functional specification.

Analysis of the estimated daily kWh on the event detail report identified:

Count of transfer CS files	Estimated daily kWh
Negative	-
Zero	5,742
More than 200 kWh	284

A sample of ten of these ICPs were checked (five with zero and the five highest with more than 200 kWh).

- Three ICPs were confirmed to be correctly recorded as zero.
- A zero was incorrectly recorded for ICP 0004601138CN47D due to the issue identified in the 2018 audit that found that when an ICP switches in and out in a short period the daily consumption figure in SAP was not always being refreshed and therefore zero consumption was recorded when there is actually consumption. A fix for this was deployed in March 2020.
- ICP 0000489051CEC85 was recorded as zero due to duplicate reads at the time of switch out.
- The ICPs sent with more than 200kWh as an average daily consumption all were sent incorrectly and were caused when the reads were inserted against the wrong registers in two instances and the other three were caused by implausible reads being recorded at the time of the CS files being sent. Implausible reads are not considered in the revised average daily consumption calculations deployed in March 2020.

The accuracy of the content of eight CS files was checked.

- The average daily consumption was calculated incorrectly for four of the eight ICPs samples. This was due to the way the average daily consumption was calculated at the time these were sent. A fix was put in in March 2020. This is described in **section 4.3**.
- ICP 0000033716WE54B was sent with an incorrect last read date. This was due to human error when the last read date was incorrectly populated as a result of the meter being removed and reinstalled on an ICP.
- ICP 0000001196ED02F was sent with an incorrect read of zero. This was corrected through the RR process.

CTCX and CTCS

CS timeliness

The timeliness of CS files is monitored using the switch breach report.

CTCX	No breaches were recorded on the switch breach report.
CTCS	No breaches were recorded on the switch breach report.

CS content

CS files are created using an ETL (extract, transform, load process) from information contained in Salesforce and DataHub.

Average daily consumption is calculated in DataHub as the consumption between the most recent validated read and the previous validated read, where the previous validated read is at least 21 days before the most recent validated read. If there is insufficient history to calculate the average daily consumption using readings, it will be estimated at 55 kWh per day. These values are noted as Forward Estimate Daily kWh in Sales Force. In the switch loss process this estimated value is manually copied to the Average Daily kWh field for inclusion in the CS file. If left blank, the CS file is populated with average daily consumption of zero.

As noted in **section 4.3**, the registry functional specification requires estimated daily kWh to be based on the average daily consumption for the last read to read period. Where the last read to read period is less than 21 days, the average daily consumption recorded will not be calculated according to the registry functional specification. The Authority's audit update memo on 18/06/19 explained that the average daily consumption calculation may change as part of the switch process review, which is due to be completed in 2020 or 2021. This has occurred for the one CTCS switch move loss process detailed

CTCX	No CS files were issued for switch moves.
CTCS	<p>No CS files with average daily kWh that was negative, zero, or over 200 kWh were identified.</p> <p>One CS file was issued for a switch move, all the information was correct except for the average daily consumption figure. This defaulted to 55 units a day but the site was an AMI site is reconciled HHR so the average daily consumption should be calculated based on the average of the last two validated reads.</p>

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.10</p> <p>With: Clause 11 Schedule 11.3</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>The average daily consumption calculation was not calculated from the read to read period until March 2020.</p> <p>Incorrect last read date provided for at least one ICP.</p> <p>CTCS</p> <p>The average daily consumption calculation was not calculated from the validated read to read period.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are recorded as moderate overall, but I note that Simply Energy's current average daily consumption calculation will not achieve compliance for short periods of supply.</p> <p>The impact on settlement and participants is minor; therefore, the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>CTCT</p> <p>Average daily consumption. As noted, a system enhancement was deployed in March 2020 to resolve this non-compliance. We are continuously working with our IT team to further improve our system logic to account for different scenarios.</p> <p>Incorrect last read date provided for at least one ICP. Error on ICP 0000033716WE54B was a user error and further training has been provided to the operator to prevent this issue from re-occurring in the future.</p> <p>CTCS/CTCX</p> <p>We have identified the issue now and have added a different process to enable compliance.</p>		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Contact has provided further training to operators and continuously works alongside our IT team to further enhance system logics which will resolve these non-compliances.</p> <p>CTCS/CTCX</p> <p>A new process has been developed and tested and is now ready for deployment, from 3 September 2020 we will be compliant.</p>		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 date the registry manager gives the gaining trader written notice of having received information about the switch completion, 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 RR and AC files issued for transfer switches were checked to confirm that the content was correct, and that Contact's systems 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 Contact's systems.

The switch breach report for the audit period was reviewed.

Audit commentary

CTCT

Timeliness of RR and AC files

If a discrepancy is detected with the switch in reads, two reads are attempted to be gained as soon as possible and these are then sent through to the losing trader.

The switch breach report recorded 141 late RRs for switch moves, 99 of those were genuine. The ten latest files were checked, and found in all but one instance these were delayed due to not being able to gain to actual reads or there was negotiation required with the losing trader before the read request was accepted causing this to be outside the four month window. Whilst these are technically late Contact are compliant with the requirement to provide complete and accurate information. ICP 0000177580TREC4 was requested for the incorrect year. An RR was sent in the first instance before this was realised and the switch was subsequently withdrawn and requested for the correct year.

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

Content and handling of RR and AC files

Contact issued 1,160 RR files for switch moves. 869 were accepted and 291 were rejected. For the sample of five acceptances and five rejections checked there was a genuine reason for Contact's RRs, they were supported by at least two validated readings, and the reads recorded in Contact's system reflected the outcome of the RR process.

Contact issued 2,458 AC files for switch moves. 1,765 were accepted and 693 were rejected. A sample of five AC rejections and five acceptances were checked. All were rejected for valid reasons and SAP reflected the correct outcome of the RR process.

Review of five switch move CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in Contact's systems.

CTCX and CTCS

Timeliness of RR and AC files

Read changes are tracked using the Salesforce dashboard.

CTCX	No breaches were recorded on the switch breach report.
CTCS	No breaches were recorded on the switch breach report.

Content of RR and AC files

In cases where CTCS or CTCX is the gaining trader and they dispute the switch meter reading because the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more, Simply Energy attempt to negotiate a changed switch meter reading which is supported by validated meter readings.

Advanced meters which have switched in on an estimate reading are checked against AMI data to determine whether a read change is required. Other read changes are identified through the read validation processes discussed in **section 9.5**.

Read changes are processed manually, and Datahub will be manually updated to ensure that it reflects the outcome of the read renegotiation process.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 for CTCX confirmed no RR or AC files were issued. Review of five switch move CS files with estimated reads where no RR was issued confirmed that the correct readings were recorded in CTCX's systems.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 for CTCS confirmed no RR or AC files were issued. There were no incoming switch move CS files with estimated reads.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.11 With: Clause 12 of Schedule 11.3 From: 03-Jun-19 To: 01-May-20	CTCT 99 late RR files. 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 rated as strong with good visibility of ICPs requiring RRs. The impact on settlement is minor because the number of ICPs is low; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has good process in place for ICPs requiring RRs however some delays are unavoidable (i.e. access issues to read the meters). We are continuously making improvements to reduce these non-compliances.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As above		Ongoing	

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

Code reference

Clause 14 Schedule 11.3

Code related audit information

The gaining trader switch process applies when a trader has an arrangement with a customer or embedded generator to trade electricity at an ICP at which the losing trader trades electricity with the customer or embedded generator, and one of the following applies at the ICP:

- *the gaining trader will trade electricity through a half hour metering installation that is a category 3 or higher metering installation; or*
- *the gaining trader will trade electricity through a non-AMI half hour metering installation and the losing trader trades electricity through a non-AMI non half hour metering installation; or*
- *the gaining trader will trade electricity through a non-AMI non half hour metering installation and the losing trader trades electricity through a non-AMI half hour metering installation*

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 Contact deem all conditions to be met. A typical sample of HH NTs were checked to confirm whether they were notified to the registry within three business days.

HH NTs on the event detail report were matched to the metering information on the meter event details report to confirm whether the correct switch type was selected.

Audit commentary

CTCT

The NT files for HH switches contained the information required by this clause.

I checked the metering category for all 27 HH NTs and found all the ICPs had meter category of 3, 4 or 5 and the correct switch type was selected. All were sent within three business days of all conditions being met.

No ICPs with metering categories above 2 were incorrectly requested as TR or MI switches.

CTCX and CTCX

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

HH switch type is applied for ICPs with metering category 3 or above.

CTCX	The NT files for HH switches contained the information required by this clause. Two NTs were issued for gaining trader switches, both had metering category 3 and the correct switch type was selected. These were effectively an internal transfer as they were switched from CTCT to CTCX therefore compliance is confirmed. No ICPs with metering categories above 2 were incorrectly requested as TR or MI switches.
CTCS	The NT files for HH switches contained the information required by this clause.

	<p>45 NTs were issued for gaining trader switches, all had metering category 3 or 4 and the correct switch type was selected. These were effectively an internal transfer as they were switched from CTCT to CTCS therefore compliance is confirmed.</p> <p>No ICPs with metering categories above 2 were incorrectly requested as TR or MI switches.</p>
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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

An event detail report was reviewed to identify AN files issued by Contact during the audit period, and a sample of two (or all) ANs per response code were reviewed to determine whether the codes had been correctly applied.

The switch breach report was examined for the audit period.

Audit commentary

CTCT

AN timeliness

SAP determines the AN code based on a hierarchy. The switch breach report did not record any late AN files.

AN content

461 HH AN files were issued during the period reviewed.

The switching process was examined in relation to Contact as the “losing trader” for a sample of HHR ICPs. 416 ANs were sent with the AA (acknowledge and accept) response code and 45 ANs were sent with the CO (contracted customer response code). A diverse sample of ten ANs were checked including five for each response code including four ICPs sent with the “CO” contracted customer code. In all cases the customer was not in contract but the account in SAP had not been closed, so SAP determined the ICP to be in contract. This is recorded as non-compliance.

CTCX and CTCS

The process to determine AN codes is automated, as described in **section 4.2**.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 confirmed no AN files were issued. No breaches were recorded on the switch breach report.
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CTCS	Review of the event detail report for 01/03/20 to 29/04/20 confirmed no AN files were issued. No breaches were recorded on the switch breach report.
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Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.13</p> <p>With: Clause 15 of Schedule 11.3</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>“CO” AN code sent incorrectly.</p> <p>Potential impact: None</p> <p>Actual impact: Low</p> <p>Audit history: Once previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate as SAP assigns the AN code based on a hierarchy.</p> <p>The audit risk rating is low as this has no direct impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Our Commercial Sales team supply a fortnightly report of C&I HHR ICP's with expiring energy agreements to assist with the proactive management of HHR Switch Losses by the Operations team. Due to the current energy market and Covid-19 conditions there have been delays in customers determining their new Retailer going forward which impacts the our ability to manage switch losses in the most effective manner. An Existing SAP system restriction results in the customer's accounts not being able to be closed to enable the correct AN code to be automatically sent to new Retailer. Our current approach by the business eliminates risk of impacting CTCT's Reconciliation Submission Data if Customer Account/ICP was end dated and the ICP does not switch away in a timely manner and CTCT is still current Retailer on Registry.		30/9/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
CTCT is transitioning C&I TOU ICP's to a new system which provides a more effective platform to manage HHR Customer contracts/products and ensure the correct AN code is sent.		30/4/2021	

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 HH switching process was examined. The switch breach history report for the audit period was reviewed to identify late CS files.

Audit commentary

CTCT

The CS file is released by SAP as soon as the AN file is received.

The switch breach history report did not record any late HH CS files, and CS content was as expected for all HH CS files.

CTCX and CTCX

CS files are created using an ETL (extract, transform, load process) from information contained in Sales Force.

CTCX	The CS file content was as expected for the two HH CS files issued during the audit period. No breaches were recorded on the switch breach report.
CTCS	The CS file content was as expected for the 45 HH CS files issued during the audit period. No breaches were recorded on the switch breach 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 reports were reviewed to:

- identify all switch withdrawal requests issued by Contact, and check a sample for accuracy,
- identify all switch withdrawal acknowledgements issued by Contact, and check a sample of rejections, and
- confirm timeliness of switch withdrawal requests, as this is not currently being identified in the switch breach report.

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

Audit commentary

CTCT

NW timeliness

Switch withdrawals are sent as soon as they are discovered, which in some instances may be more than two months after the event date.

The switch breach report recorded 171 late NW files (NA breaches). I confirmed that all the breaches were invalid, and CTCT had not issued late NWs for the affected ICPs.

The switch breach report recorded six breaches for not completing the withdrawal cycle within ten business days, all were genuine and related to issues confirming whether the switch was to be withdrawn and negotiations with the other retailer.

Analysis of the event detail report found 215 (2.0%) of the 10,714 NWs were issued more than two calendar months after the switch date.

- 111 late withdrawals used the code for wrong premises, and I note that this issue often does not become apparent for an extended period after a switch completes.
- 58 late withdrawals were due to customer cancelling and not advising the trader for some time.
- 40 late withdrawals were due to a date failure.
- Six late withdrawals were due to metering issues.

A sample of the ten latest files were reviewed and, in most cases, there was a complex set of circumstances leading to the delayed withdrawals.

AW timeliness

Switch withdrawals received are managed via the switch breach report to ensure that a response is sent within five business days of receipt. The switch breach report did not record any late AW files.

Content and handling of NW and AW

All withdrawal codes are selected manually except for wrong switches “WS” which are sent automatically by SAP if a transfer switch is requested on a vacant property. The content of 16 NW files (including at least two for each NW advisory code and 14 rejected requests) was compared to details in SAP, and in all but one case the withdrawal reasons provided by Contact was accurate. The unauthorised switch “UA” code was sent incorrectly for ICP 0007120692RND18.

692 (6.7%) of the 10,353 AWs issued by Contact were rejections. I reviewed a diverse sample of 14 rejections by Contact (including at least two for each NW advisory code), and confirmed they were rejected based the information available at the time the response was issued.

CTCX and CTCS

NW and AW timeliness

NWs are issued as soon as possible after Simply Energy has confirmed that a withdrawal is required. AWs are tracked using the Salesforce dashboard.

CTCX	No breaches were recorded on the switch breach report.
CTCS	No breaches were recorded on the switch breach report.

NW and AW content

NWs and AWs will be created manually, and withdrawal and response codes will be applied based on the best information available.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 for CTCX confirmed no NW or AW files were issued.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 for CTCS confirmed no NW or AW files were issued.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.15</p> <p>With: Clauses 17 and 18 Schedule 11.3</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>Six switch withdrawals not resolved within ten business days of the withdrawal being initiated.</p> <p>At least one incorrect NW code sent.</p> <p>215 late NW files.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times previously</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are strong for the management of withdrawals. These are worked on a case by case basis except for transfer requests received on vacant properties where a wrong switch withdrawal is issued by SAP.</p> <p>There was a minor impact on settlement due to the correction of consumption information. There was also a minor impact on the customer; therefore, the audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Contact has robust process in place. As noted, most of the withdrawals are related to wrong premises which can involve lengthy and complex investigations with different participants hence some delays are unavoidable.</p> <p>The one instance where incorrect an NW code was sent due to user error. Further coaching has been provided to mitigate this issue.</p>		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Ongoing coaching as required.		Ongoing	

4.16. Metering information (Clause 21 Schedule 11.3)

Code reference

Clause 21 Schedule 11.3

Code related audit information

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

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

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

Audit observation

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

Audit commentary

The reads applied in switching files were examined in **section 4.3** for standard switches, **section 4.10** for switch moves, and **sections 4.4** and **4.11** for read changes. The meter readings used in the switching process are validated meter readings or permanent estimates. One of the move switch ICPs (ICP 0000001196ED02F) sampled in **section 4.10** for CTCT, was sent with the incorrect last read.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.16 With: Clause 21 Schedule 11.3 From: 23-May-19 To: 23-May-19	CTCT One CS file did not reflect the actual reading or best estimate of an actual reading on the event date. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong, as the processes in place are largely automated and the correct read or estimate is sent. This was an exception. The impact on settlement and participants is minor; the kWh difference in readings was small.		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has raised an IT ticket to investigate this issue. Depending upon the outcome of this investigation, we anticipate a fix will be deployed.		Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
IT ticket has been raised to investigate and implement a fix.		Ongoing	

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

Code reference

Clause 11.15AA to 11.15AC

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

The code has changed in relation to this area during the audit period. The code that was current at the time of the switch withdrawal was assessed. CTCT, CTCX and CTCS were not switch save protected participants. Any switch withdrawals made prior to the event date were examined.

The new code limits the type of customer contact that can be made when a switch has been initiated. Contact's win-back approach was discussed, and the event detail report was analysed to identify withdrawn switches with a CX code applied prior within 180 days of the switch.

Audit commentary

CTCT

Contact no longer carries out win back activity. The team associated with this activity was disbanded one week before this clause came into effect.

Review of the event detail report identified one NW issued with a CX withdrawal reason code for a switch save protected trader prior to completion of the switch and prior to the code changing. This was checked and confirmed to be compliant.

A typical sample of ten ICPs that had been withdrawn within 180 days of the switch were examined and found in all instances that the customer had contacted Contact to request the withdrawal.

CTCX and CTCS

No win-back activity is undertaken for the CTCX and CTCS codes.

CTCX	Review of the event detail report for 01/09/19 to 01/05/20 for CTCX confirmed no NW files were issued.
CTCS	Review of the event detail report for 01/03/20 to 29/04/20 for CTCS confirmed no NW files were issued.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

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

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

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

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

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

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

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

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

Audit observation

The processes to identify and monitor unmetered load were discussed.

CTCT

The registry list for 9/04/20 and the audit compliance report were reviewed to identify all shared unmetered load. I checked the accuracy of the unmetered daily kWh.

CTCX and CTCX

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were reviewed to identify all shared unmetered load.

Audit commentary

CTCT

This is monitored as part of the BAU discrepancy process in place. 242 ICPs had shared unmetered load indicated by the distributor. The loads were confirmed to be correct with the exception of ICP 0007188677RN105. This was an unmetered BTS supply with shared unmetered load associated with it. The unmetered BTS was removed and the unmetered load was end dated which end dated all the unmetered load. This has been corrected.

CTCX and CTCX

Any new unmetered load will be identified through the validation checks described in **section 2.1**

Examination of the list files and audit compliance reports found no ICPs with shared unmetered load.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 5.1 With: Clause 11.14 From: 03-Jun-19 To: 31-May-20	CTCT One ICP with missing shared unmetered load due the BTS supply being removed. 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 rated as strong because they mitigate risk to an acceptable level. The impact on settlement is minor, therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The affected ICP has now been corrected from unmetered BTS to now show the shared PROW street light values. Network reporting and improved unmetered BTS to Perm process to ensure end dating / removal of the unmetered load values following meter installation will detect and reduce these kinds of issues.		20 May 2020	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
As required, through continued monitoring		Ongoing	

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

CTCT

The registry list for 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were examined to confirm process compliance.

CTCX and CTCS

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were examined to confirm process compliance.

Audit commentary

CTCT

17 ICPs had a load between 3,000 and 6,000 kWh and all were of an approved load type.

One ICP had a load greater than 6,000 kWh. This was reported in the last audit and it is taking longer than expected to get this metered, but this is in progress. The details are below for reference.

ICP	Daily kWh	Annual kWh	Retailer Field	Comments
0015736828EL6C4	35.73	13,041.45	3000;11.6; 10 x SLIGHTS.	The ICP belongs to a retirement village in Paraparaumu.

CTCX and CTCS

Examination of the list files and audit compliance reports found one ICP for CTCS (ICP 0643083001PC0990) that exceeds the 3,000 kWh per annum. This was reviewed and confirmed to be of an approved load type.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 5.2 With: Clause 10.14 (2)(b) From: 02-Apr-18 To: 31-May-20	CTCT One standard unmetered ICP has an estimated annual consumption over 6,000 kWh per annum. 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 strong with regard to identifying and attempting to resolve the any ICPs with loads that exceed the allowable threshold. There is no suggestion that settlement is inaccurate, therefore the impact is considered minor and the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
No further action required (see 5.3)		Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Improved load type data gathering will assist in the identification of sites with excess loads and reporting will assist in detection.		Ongoing	

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 retailer proposes to take or is taking to reduce the unmetered load.

Audit observation

CTCT

The registry list for 9/04/20 and the audit compliance report for the period from 1/05/19 to 9/04/20 were reviewed to identify all unmetered load over 6,000 kWh per annum. These were all examined.

CTCX and CTCS

The registry lists as at 3/05/20 and the audit compliance reports for the period from 1/06/19 to 3/05/20 were reviewed to identify all unmetered load over 6,000 kWh per annum. These were all examined.

Audit commentary

CTCT

Contact added the unmetered load to ICP 0015736828EL6C4 in June 2018. Corrective measures commenced within 20 business days, but the corrective measures have not been completed within a subsequent 20 business days. No other participants are affected so no notification is required.

CTCX and CTCS

Simply Energy is aware of the unmetered load threshold and will install metering where an ICP breaches or is likely to breach the threshold. No ICPs exceeded the unmetered load threshold. Compliance is confirmed.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 5.3 With: Clause 10.14 (5) From: 14-Jun-18 To: 31-May-20	CTCT One standard unmetered ICP has estimated annual consumption over 6,000 kWh per annum and has not been resolved within 20 business days. 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 strong as there are robust processes in place to monitor unmetered loads. In this instance it has taken longer than expected to get this load metered. There is no suggestion that settlement is inaccurate, therefore the impact is considered minor and the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The ICP in question is to be metered across three new ICPs. At this stage Contact is exploring options with the customer to get the required on site work completed. It is a retirement village and we are currently waiting on approval to begin required site work and alterations.		Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Improved load type gathering will assist identification of sites with excessive loads		Ongoing	

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

CTCT

Contact has responsibility for a number of distributed unmetered load databases. The audit findings are detailed in the table at the end of this section.

CTCX

The CTCX code is only used for Simply Energy HHR billed ICPs, and no DUML ICPs are expected to be supplied. The list file was examined, and no distributed unmetered load databases were identified.

CTCS

The processes to manage distributed unmetered load were reviewed. The list file was examined as at 9/04/20 and no distributed unmetered load databases were identified. Three DUML ICPs switched in effective from 01/06/20.

Audit commentary

CTCT

The following exemptions are in place for DUML:

Exemption No. 177: Exemption to clause 8(g) of schedule 15.3 of the Electricity Industry Participation Code 2010 in respect of providing half-hour ("HHR") submission information instead of non half-hour ("NHH") submission information for distributed unmetered load ("DUML"). This exemption expires at the close of 31 October 2023.

Exemption No. 185: Exemption to clause 11 of schedule 15.3 of the Electricity Industry Participation Code 2010 in respect of creating DUML databases for the following ICPs. This exemption expires on the date on which Contact no longer has responsibility as the trader for these ICPs on the registry. One of the affected ICPs is still supplied by Contact, therefore the exemption is still valid.

ICP identifier	Comments
0001183605HB0B0	Contact still has responsibility for this ICP; under veranda lights with load of 3.7 kWh per day are connected.

DUML audits for databases were conducted by Veritek.

The Electricity Authority issued a memo on 18 June, 2019 confirming that the code requirement to calculate the correct monthly load must:

- take into account when each item of load was physically installed or removed, and

- wash up volumes must take into account where historical corrections have been made to the DUMML load and volumes.

Currently Contact use a snapshot of a DUMML database taken at the end of each month to derive submission.

I have reviewed all of the DUMML audits and detailed in the table below the main submission related issues applicable for the DUMML databases that Contact is recorded as the trader for:

Database	Main issues	Potential kWh impact (per annum)
Auckland Transport	Over submission because dimming is not accounted for.	Unknown.
	Adjustment of data outside of RAMM.	Under submission of 1,141,574 kWh.
	Database potential inaccuracy calculated by the DUMML audit tool.	Under submission of 1,165,100 kWh.
Christchurch City Council	Smart lights (operated by light sensor) incorrectly recorded as reconciled elsewhere and the load controlled by the SCADA resulting in the incorrect burn hours being used.	Unknown as actual burn hours are not measured.
Hutt CC	Database potential inaccuracy calculated by the DUMML audit tool.	Over submission of 54,600 kWh.
New Plymouth DC	Database potential inaccuracy calculated by the DUMML audit tool.	Under submission of 61,100 kWh.
Ohoka Downs Community lights	Incorrectly recorded as disconnected since 22/8/17 then corrected in July 2019 but then returned to disconnected 22/8/19.	Under submission of 7,423 kWh per annum has occurred.

The table below shows the additional items from the current DUMML audit reports, which affect submission information:

Database	DUML Audit completed or to be completed by 16A.26	Deriving submission information 11(1) of schedule 15.3	ICP identifier 11(2)(a) of schedule 15.3	Location of items of load 11(2)(b) of schedule 15.3	Description of load 11(2)(c)&(d) of schedule 15.3	All load recorded in database 11(2A) of schedule 15.3	Tracking of load changes 11(3) of schedule 15.3	Audit trail 11(4) of schedule 15.3	Database accuracy 15.2 and 15.37B(b)	Volume information accuracy 15.2 and 15.37B(c)
Mackenzie DC	1/06/20	No	Yes	Yes	Yes	No	Yes	Yes	No	No
Kapiti Coast DC	1/12/19	No	No	Yes	Yes	Yes	Yes	Yes	No	No
Tasman NZTA	1/12/19	No	Yes	No	No	No	Yes	Yes	No	No
Mainpower NZTA	1/06/19	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Dunedin CC	1/06/19	No	Yes	Yes	Yes	No	Yes	Yes	No	No
Waimea Village 0000036536NT7F0	1/12/18	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Far North Holdings	15/12/19	No	Yes	Yes	No	No	No	No	No	No
Kapiti Retirement Trust	1/12/18	No	Yes	Yes	No	Yes	Yes	No	No	No
Auckland Transport	15/11/19	No	No	No	No	No	Yes	Yes	No	No
Manawatu DC	1/06/19	No	Yes	Yes	No	Yes	Yes	Yes	No	No
Hutt CC	1/07/20	No	No	Yes	No	Yes	Yes	Yes	No	No
Christchurch CC	1/03/20	No	Yes	Yes	Yes	No	Yes	Yes	No	No
Christchurch CC Traffic Lights	31/05/19	No	No	Yes	No	No	Yes	No	No	No
Metlifecare Greenwood Village	12/06/20	No	Yes	Yes	Yes	No	Yes	Yes	No	No
New Plymouth DC	1/12/19	No	No	Yes	No	No	Yes	No	No	No

Database	DUML Audit completed or to be completed by 16A.26	Deriving submission information 11(1) of schedule 15.3	ICP identifier 11(2)(a) of schedule 15.3	Location of items of load 11(2)(b) of schedule 15.3	Description of load 11(2)(c)&(d) of schedule 15.3	All load recorded in database 11(2A) of schedule 15.3	Tracking of load changes 11(3) of schedule 15.3	Audit trail 11(4) of schedule 15.3	Database accuracy 15.2 and 15.37B(b)	Volume information accuracy 15.2 and 15.37B(c)
NZTA Wairarapa & Masterton	1/06/20	No	Yes	Yes	Yes	Yes	Yes	No	No	No

I note that the Christchurch traffic light audit was not submitted by the previous trader hence the audit appears to be overdue but this was prior to Contact's period of responsibility. The previous audit report is now under review with the Electricity Authority.

The information in the database must be maintained in a manner that the resulting submission information meets the accuracy requirements of clause 15.2. Contact are proactive in their management of customers with distributed unmetered load but, as detailed in the table above, not all databases are managed by the customer to the standard required by the code. This is recorded as non-compliance below.

CTCX

The CTCX code is only used for Simply Energy HHR billed ICPs, and no DUML ICPs are expected to be supplied.

CTCS

Simply Energy is aware of the requirements for DUML, including tracking of load changes as discussed in the Authority's memo dated 18/06/19.

Simply Energy intends to reconcile DUML loads as NHH using the DST profile, and EMS will produce the submissions as an agent. This process was reviewed as part of EMS' agent audit, and found to be compliant.

- Wattages will be derived from monthly extracts provided by the database owners. Simply Energy will provide the monthly wattage for each ICP to EMS.
- On and off times will be derived from data loggers read by EMS, and used to create a shape file.
- EMS will use the wattage and logger hour information to calculate the kWh and produce an AV080 file.

Three DUML ICPs switched in effective from 01/06/20.

ICP	Database Owner	Profile
0000020005MO20D	Mackenzie Mountain Power	UML
0000010005MO321	Mackenzie Mountain Power	UML
0016099024EL49F	Kapiti Coast District Council	DST

The Kapiti Coast District Council load will be settled using the DST profile.

There is no data logger information available for Mackenzie Mountain Power, so the load will be settled using Simply Energy's standard unmetered load process and the UML profile. Simply Energy records unmetered load by manually calculating and entering meter readings against an unmetered load register. The readings are calculated as previous reading + (daily unmetered kWh x number of days between reading dates). The daily unmetered kWh will be updated where changes occur.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 5.4</p> <p>With: Clause 11 of schedule 15.3</p> <p>From: 03-Jun-19</p> <p>To: 31-May-20</p>	<p>CTCT</p> <p>The monthly database extracts used to derive submission from are provided as a snapshot and do not track changes at a daily basis as required by the code.</p> <p>Inaccurate submission information for several databases.</p> <p>Four streetlight audits not submitted by the due date.</p> <p>Potential impact: High</p>

	<p>Actual impact: High</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 6</p>		
Audit risk rating	Rationale for audit risk rating		
High	<p>The controls in place mitigate risk most of the time, therefore the control rating is moderate.</p> <p>There is a major impact on settlement outcomes because there are examples of over submission and under submission; therefore, the audit risk rating is high.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>Monthly Snapshot vs Daily.</u></p> <p>Contact believes the difference between daily updated streetlight counts compared to a monthly snapshot is within a similar accuracy tolerance a physical metering installation of equivalent size has under the code however unmetered installations are not provided any accuracy tolerance in the calculation of consumption information.</p> <p>The additional effort and cost to comply with these clarified code requirements will ultimately result in increased costs and administration for the end consumer with minimal if any submission accuracy benefit.</p> <p>Contact Energy are investigating how we can be compliant with the new clarification of this rule – received on 28 June 2019. And we will update our DUML customers of this additional database accuracy requirement.</p> <p>We are looking at how we can ensure our customers have accurate databases that can provide report of this data complete with a daily breakdown and if the database providers have any existing reports that will help with this.</p> <p>We also need to look at how this can be done on a daily basis in our system. This will not be a quick change.</p> <p><u>Database Accuracy – All Councils</u></p> <p>We continue to work with our customers on their databases to ensure they are the most accurate and compliant that they can be.</p> <p>All HHR DUML ICP's will be switching to CTCS by the 31/12/2020 and the business needs to establish new processes between both CTCT/CTCS to ensure DUML compliance is still maintained/improved upon and all outstanding issues resolved.</p> <p>This includes trying to identify further opportunities to leverage off CTCS's systems and technologies to improve processes and ultimately CTCT's overall DUML accuracy and compliance.</p>			Identified

<p><u>Auckland Transport:</u> Over submission because dimming is not accounted for.</p> <p>This issue was raised during the DUML audit meeting between Auckland Transport, Veritek and CTCT, with update from David Dick from Auckland Transport confirming they are still following up with the Electricity Authority to gain compliance for their CMS system to be utilised.</p> <p>Once approval has been obtained, CTCT will work with the customer to establish the new processes that will be required for the calculation the streetlight consumption for these ICP's each month.</p> <p><u>Christchurch City Council:</u> Smart lights (operated by light sensor) incorrectly recorded as reconciled elsewhere and the load controlled by the SCADA resulting in the incorrect burn hours being used.</p> <p>Contact is actively trying to arrange for a data logger to be installed that will record the actual hours of operation for these lights. While the smart lights are not part of the Orion ripple controlled circuit but operated via a light sensor – we have confirmed with Orion that their ripple control circuit is also triggered by a light sensor meaning both circuits are materially aligned in terms of on/off times.</p> <p><u>Ohoka Downs Community lights</u></p> <p>Please see full details in Audit Ref: 3.9 With: Clause 19 of schedule 11.1</p> <p>SAP Installation Fact has been updated to include all 22 HPS 70W lights which should be connected to this street lighting circuit.</p> <p>CTCT's 14 Month washup for the September 2020 period to include all of CTCT's under submitted volume from 22/8/2017 to 31/7/2019. Correct monthly volume to be submitted going forward from 1/8/2020.</p> <p><u>Overdue DUML Audit Reports</u></p> <p>CTCT acknowledges not all draft audit reports have been responded to within the required timeframes. Delays here have been caused by the restructuring that has occurred in the Operations team, Covid-19 impacts and inadequate structures being in place now that the Operations team is responsible for DUML compliance activities.</p> <p>The four overdue reports will be finalised by 30/9/2020 and more effective processes and controls implemented to ensure ALL DUML workflows are actioned fully and in a timely manner.</p>		
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Preventative actions taken to ensure no further issues will occur	Completion date	
<p>We are working on a process, system enhancements and customer understanding</p> <p>Quarterly database checks are being conducted on each of our customers databases. We work closely with the customers to ensure they are as compliant as they can be.</p>	Ongoing	

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

CTCT

Metering installations installed

Contact's new connection process includes a check that metering is installed before energisation occurs, or that any unmetered load is quantified.

Subtraction has been used to determine submission information for three ICPs during the audit period, in accordance with the following exemptions:

- **Exemption No. 203:** Exemption to clause 10.24(c) of the Electricity Industry Participation Code 2010 to allow subtraction to determine submission information for ICP 0000880392WEA92,
- **Exemption No. 191:** Exemption to clause 10.24(c) of the Electricity Industry Participation Code 2010 to allow subtraction to determine submission information for ICP 0000032431HR99C, and
- **Exemption No. 275:** Exemption to clause 10.24(c) of the Electricity Industry Participation Code 2010 to allow subtraction to determine submission information for ICP 0008803342WEFC3. The exemption expired when ICP 0008803342WEFC3 was decommissioned effective from 01/11/2019.

I walked through the submission process for each of the affected ICPs, and checked a sample of data to confirm that the submissions were calculated correctly.

Distributed Generation

Contact has a process in place to identify ICPs where distributed generation possibly exists. They monitor changes to the registry by distributors and then conduct outbound communication inviting the customer to apply to Contact for approval to supply their generated quantities. The operations team manages profiles on the registry, and periodically updates the registry profiles.

I confirmed that Contact's NHH reconciliation process automatically changes the profile for injection registers to PV1 for submission if there is an open trading notification for PV1 profile at the GXP and the registry shows RPS. Because the registry management and reconciliation processes for generation profiles are not synchronised, the profiles recorded on the registry for generating ICPs may differ from the profiles used for submission.

5,265 active ICPs with generation listed by the distributor were identified on the registry list as at 09/04/20. Review of the AC020 report found there were ten ICPs with generation recorded by the distributor where CTCT did not record a generation profile. Nine were corrected to RPS PV1 profile prior to the audit. Contact is still investigating whether ICP 0004301000CA520 is generating.

The registry list as at 09/04/20 recorded 134 active ICPs where the distributor recorded an installation type of L and no generation capacity, but CTCT recorded a generation profile. By the time the audit was completed, all of these ICPs had an EG register with the settlement flag set to Y.

Contact assumes that all distributed generation is photovoltaic unless advised by the customers. I recommend below that the Distributor's fuel type is checked for ICPs with distributed generation.. Where a generation profile was recorded, I checked that the profile was consistent with the fuel type listed by the distributor.

- No ICPs with a solar fuel type had EG1 profile applied.
- 60 ICPs with other fuel type had PV1 applied, but EG1 was expected. 34 were confirmed to have solar installed on www.energysafety.govt.nz/energysafety/app/highrisk-db, and 15 were confirmed to have solar generation through review of the customer's application or google streetview information. I was unable to confirm the correct fuel type for the other nine ICPs.
- ICP 0011006802PCDFA has wind fuel type had PV1 applied, but EG1 was expected. I was unable to confirm the correct fuel type of the ICP.

Recommendation	Description	Audited party comment	Remedial action
Profile and fuel type consistency	CTCT Check the Distributor's indicated fuel type for all distributed generating ICPs. Confirm the fuel types for the following ICPs so that the correct generation profile can be determined: 0011006802PCDFA (PV1/wind) 0000029336HRC55 (PV1/other) 0000950408LNEF9 (PV1/other) 0005070279RNF1D (PV1/other) 0005441773RN1BA (PV1/other) 0006204224TUB94 (PV1/other)	Contact will engage with the relevant distributors to encourage them to populate the registry with more accurate fuel type information for these ICPs plus any additional ICPs that are flagged as having some form of generation installed in the future	Identified

Recommendation	Description	Audited party comment	Remedial action
	0007138276RNF48 (PV1/other) 0007160293RN6C9 (PV1/other) 0008813385ML931 (PV1/other) 0080280200WR39C (PV1/other)		

The missing and incorrect profiles are recorded as non-compliance in **section 2.1**.

Bridged meters

Meters are only bridged where an urgent reconnection is required, and a soft reconnection cannot be arranged. Contact has been working with MEPs to extend the hours that soft reconnections can be completed within, which will help to reduce the volume of bridged meters.

Contact confirmed 164 ICPs were bridged to reconnect during the audit period. 147 were later unbridged. The existence of bridged meters is recorded as non-compliance below. Capture of the bridged consumption is discussed further in **section 8.1**.

CTCX and CTCX

Metering installations installed

All active ICPs have metering installed except residual load ICPs with an SB reconciliation type. Subtraction is not used to determine any submission volumes.

Distributed Generation

CTCX supplies three active ICPs with distributed generation indicated by the distributor. All have HHR profile. There were no ICPs with generation recorded by the distributor where CTCX did not record a generation profile.

CTCS does not supply any active ICPs with distributed generation indicated by the distributor.

Bridged meters

No bridged meters were identified during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 6.1</p> <p>With: Clause 10.13</p> <p>From: 20-May-19</p> <p>To: 24-Mar-20</p>	<p>CTCT</p> <p>While meters were bridged, energy was not metered and quantified according to the code for 164 ICPs.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>

Audit risk rating	Rationale for audit risk rating	
Low	<p>Controls are rated as moderate as they are sufficient to reduce the risk most of the time.</p> <p>The audit risk rating is low. Bridging only occurs where a soft reconnection cannot be performed after hours and the customer urgently requires their energy supply for health and safety reasons. Corrections are processed as discussed in section 8.1.</p>	
Actions taken to resolve the issue		Completion date
<p><u>Bridged meters</u></p> <p>Contact has been working with our MEPs to reduce the incidence of bridging as can be seen by the reduction in the number of corrections undertaken over the last 12 months. Additionally 3 of our AMI MEPS are undertaking either mass modem upgrades to 4G or mass upgrades of AMI metering equipment which is expected to improve remote reconnection service performance and further reduce incidences of meter bridging.</p>		Ongoing
Preventative actions taken to ensure no further issues will occur		Completion date
See above		Date

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 the GIPs which Contact is responsible for, and the certification expiry date for those GIPs. Changes to the NSP table were reviewed to determine whether they had been processed accurately.

Audit commentary

CTCS and CTCX are not responsible for any GIPs. CTCT is responsible for the GIPs shown in the table below.

Responsible party	Description	NSP	MEP	Previous certification expiry date (if different)	Certification expiry date
CTCT	CLYDE	CYD2201CTCTG	ACCM	1/03/2020	19/12/2020
CTCT	OHA AKI	OKI2201CTCTG	ACCM	13/03/2020	02/11/2020
CTCT	POIHIPI	PPI2201CTCTG	ACCM	23/11/2019	30/05/2021
CTCT	ROXBURGH	ROX1101CTCTG	ACCM		22/05/2022
CTCT	ROXBURGH	ROX2201CTCTG	ACCM		5/07/2021
CTCT	STRATFORD	SFD2201CTCTG	ACCM	21/01/2020	23/08/2021
CTCT	TE MIHI	THI2201CTCTG	ACCM		25/09/2021
CTCT	WHIRINAKI	WHI2201CTCTG	ACCM	19/10/2019	05/11/2020
CTCT	WAIRAKEI	WRK2201CTCTG	ACCM	23/02/2020	26/10/2020

Contact has not made any new connections to the grid during the audit period. All grid connection points Contact is responsible for have current certification recorded on the network supply point (NSP) table. An alternative certification arrangement is in place for PPI2201CTCTG due to COVID-19.

Certification dates for CYD2201CTCTG, OKI2201CTCTG, PPI2201CTCTG, SFD2201CTCTG, WHI2201CTCTG and WRK2201CTCTG were updated during the audit period. Accucal updates meter certification changes directly, and the timeliness of meter recertifications is closely monitored by the generation operations team. All meter certification updates during the audit period were processed on time.

Audit outcome

Compliant

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 AC020 reports and registry lists were reviewed to confirm the profiles used.

All active ICPs with profiles requiring control device certification were checked to determine whether AMI or HHR metering was installed, or the control device was appropriately certified.

Audit commentary

CTCT

The AC020 report for 01/05/19 to 09/04/20 identified 1,966 ICPs with profiles which require AMI or HHR metering, or a certified control device. Of those 310 did not have AMI metering or a certified control device. Contact's reconciliation process applies RPS (using the force RPS process) if the ICP metering does not meet the requirements of the profile.

Contact elects not to update the profile to RPS in SAP and the registry, so that if/when the MEP updates their control device certification records the force RPS process will be disabled and the correct profile will be applied. The affected ICPs are highly visible, so they can be tracked and followed up with the MEPs.

There has been a dramatic improvement from 16,816 ICPs with a controlled profile recorded on the registry but submitted as RPS during the 2018 audit to 1,918 ICPs in the 2019 audit and 310 ICPs this audit. The improvement has been achieved by working with the MEPs to update their certification details on the registry, including correction of control device certification flags.

Compliance is recorded in this section, because where the controlled profiles are used for submission, the ICPs met the requirements of the profiles. Non-compliance is recorded in **section 2.1** for the 310 ICPs submitted as RPS which have controlled profiles recorded on the registry.

CTCX

Review of the registry list for 01/09/19 to 02/05/20 found CTCX did not use any profiles which required certified control devices.

CTCS

Review of the registry list for 01/03/20 to 03/05/20 found five ICPs used profiles which required a certified control device. The AC020 report confirmed that all the affected ICPs had certified control devices.

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 meter reading validation process, or from information provided by the meter reader, agent, the MEP, or the customer. Upon identifying a possible defective meter, a field services job is raised to investigate and resolve the defect and a consumption correction is processed if necessary. Corrections are discussed in **sections 2.1, 8.1 and 8.2**.

CTCT

I reviewed 34 examples of potential defective meters, including 23 bridged meters and 11 stopped meters.

Contact issues requests to MEPs to unbridge AMI meters, and Delta to unbridge legacy meters. Contact expects that Delta will arrange meter replacement and certification when unbridging legacy meters. Delta and Contact do not usually advise the MEP of the fault when a legacy meter is unbridged without being replaced, and I found six instances where the MEP had not been advised that a meter had been bridged. For all other defective meters, a field services job was raised, and the MEP was advised.

I followed up two metering issues which were identified during AMS' audit:

- ICP 0080012939PCBD6 was isolated in January 2020 and was expected to remain isolated until approximately June 2020. Contact confirmed that the issues have not been resolved and progress will be followed up with AMS.
- ICP 0000800105TP315 had a burnt transformer and unrecoverable data since January 2020. AMS, Contact and the customer are working on a permanent solution to resolve the issue which has been delayed by the COVID-19 lockdown.

CTCX and CTCX

No defective or bridged meters were identified during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.4 With: Clause 10.43(2) and (3) From: 01-Aug-19 To: 25-Mar-20	CTCT The MEP was not advised of six bridged meters. 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, the MEP is advised of defects except where legacy meters are unbridged by Delta without being replaced. The audit risk rating is low based on the number of ICPs affected.

Actions taken to resolve the issue	Completion date	Remedial action status
<p>On review of why our service provider (Delta) did not replace the legacy meter whilst resolving the bypass, we have found a gap in our process which has since been resolved.</p> <p>From the six reviewed:</p> <ul style="list-style-type: none"> One related to a contact Prepower meter (Currently there are less than 20 active Prepower ICPs left as we continue to replace this old product). The wrong process was used by the contractor (required an activation code, not a meter bypass). The other five related to AMI Meters that had been incorrectly assigned to our legacy service provider (Delta). All five related to a particular type of service order involving customer switching which unfortunately lead to AMI meters being bypassed. The unbridged meter should have been assigned directly to the MEP, however due to a timing issue and the device information not being present in our system it defaulted to the legacy service order process. 	01/09/20	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>A new internal control has now been added. Instead of the 'unbridge meter' service order being directly assigned to a third party contractor (Delta) the Field Services team validate the metering equipment MEP and manually assign (same day) to either the MEP (AMI assets) or if it is a legacy meter, to Delta.</p>	01/09/20	

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

- ensure the system is to within +/- 5 seconds of NZST or NZDST*
- compare the meter time to the system time*
- determine the time error of the metering installation*
- if the error is less than the maximum permitted error, correct the meter's clock*

- 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.

Contact'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 Contact were reviewed.

Contact's own data collection processes for generation data were reviewed.

Audit commentary

All information used to determine volume is collected by Contact, one of their agents, or the MEP.

CTCT

HHR

Agents monitor clock synchronisation, and this is covered as part of their audits. Clock synchronisation events are provided to Contact by AMS and EDML. The reports are reviewed, and corrective action is taken as required.

AMS temporarily stopped sending monthly clock synchronisation events from January to May 2020 due to a user process error, and reporting was reinstated in June 2020. During this time AMS continued to email individual events requiring action as they occurred.

AMI

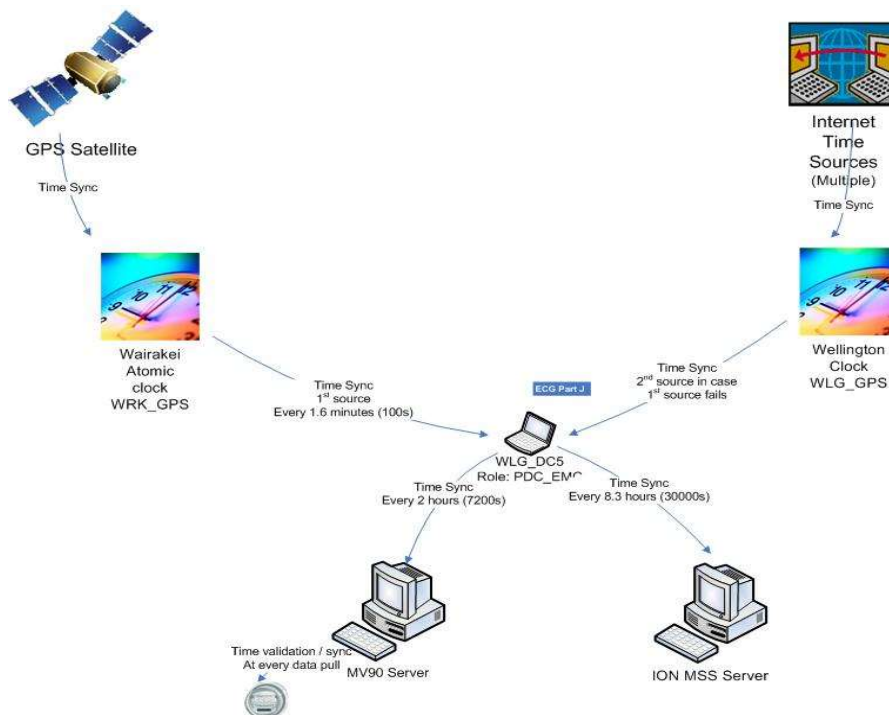
MEPs monitor clock synchronisation, and this is covered as part of their audits. Each of the MEPs advise Contact of clock synchronisation events, and no action is usually required. Emailed events are reviewed and actioned as required.

Generation

The generation clock synchronisation process has not changed during the audit period. The diagram below shows Contact's timekeeping process for generation metering.

The MV90 server is synchronised every two hours and prior to the commencement of any interrogation. WLG-DC5 time is manually checked on a periodic basis and this event is recorded.

During interrogation, a comparison occurs between data logger and MV90 clocks. MV90 is set to automatically synchronise all data logger clocks where time errors are less than or equal to five seconds. Where time errors exist, which are greater than five seconds, but less than or equal to 60 seconds, the error is recorded in the events log and this event is noted as a failed task. A time synchronisation is still performed automatically, and the data is accepted as it is considered by Contact that the data has not been affected by the time error. If the time error is greater than 60 seconds, then the data is downloaded; however, the time is not synchronised, and the data is deemed invalid. An investigation then occurs which may result in data correction. No clock errors outside the threshold occurred during the audit period.



CTCX and CTCX

Information used to determine volume information is provided to Simply Energy by MEPs and agents, and compliance has been demonstrated as part of their MEP and agent audits.

Information on clock synchronisation events is provided when events occur and is manually reviewed by Simply Energy. There were no examples of clock synchronisation events requiring action during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

- a) obtain the meter register
- b) ensure seals are present and intact

- c) *check for phase failure (if supported by the meter)*
- d) *check for signs of tampering and damage*
- e) *check for electrically unsafe situations.*

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

Audit observation

The data collection process was examined.

Processes to provide meter condition information were reviewed as part of the agent audits. Contact'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 review of process documentation.

Audit commentary

CTCT

Derivation of volume and labelling of readings

Review of a diverse sample of meter readings confirmed they are appropriately labelled, and validated readings are derived from meter readings. Readings for two Smartco meter registers for ICP 0000017802EAAC8 were recorded with an incorrect read date, because no readings were available on the meter read order date. This is recorded as non-compliance in **sections 6.7** and **12.7**.

Datacol and MRS readings

Datacol and MRS data collection processes were reviewed as part of MRS' agent audit and found to be compliant. I confirmed that there have been no changes to MRS processes since their 2019 audit.

MRS provides meter condition information with their read files. The meter condition information is imported into SAP and used to create BPEM (Billing Process Exception Management) events, which are directed to work queues in SAP for investigation and action.

I requested information on meter condition events during the audit period from MRS and Contact, and found a small number of events had been identified and actioned, including meter register differences and tampering. Contact has followed up with MRS regarding the low number of meter condition events being reported, and they have confirmed that events are reported where they occur.

Customer reads

MRS and Datacol do not record customer readings; customers are advised to provide any customer readings directly to Contact.

Customer reads are entered through Contact's app or provided to a customer services representative by email or phone. Reads entered into the app are loaded directly into SAP and validated. If the read fails validation a high priority BPEM is created and directed to a user, who will check the read and reconfirm it with the customer. Readings entered by CSRs are manually validated on entry, and pass through the SAP read validations.

If an actual reading is received after a customer reading is entered it will be loaded in SAP as an actual but unbillable read and create a "MRO (meter read order) not found" exception. The reading will be used to generate historic estimate and future invoice estimates but will not be used for billing.

Customer reads are not treated as validated readings unless they have been validated by two actual readings from another source. I checked a sample of ten customer readings and found all had the customer read type correctly recorded. One customer reading for ICP 0000042513NTBD3 meter R26109 on 21/11/19 was mis-keyed, 83597 was entered instead of 83599. Customer reads are not used in the historic estimate process, and there is no impact on settlement.

CTCS and CTCX

Derivation of volume and labelling of readings

Review of a diverse sample of meter readings confirmed they are appropriately labelled, and validated readings are derived from meter readings. ICP 0000022997EA768 had NHH end reads corresponding to the end of the first day as HHR sent to EMS because of a copy and paste error, and is recorded as non-compliance in **sections 6.7, 9.1 and 12.7**.

MRS and Wells readings

MRS provides readings for CTCS, and Wells provides readings for CTCX. MRS and Wells' data collection processes were reviewed as part of their agent audit and found to be compliant.

MRS usually provides information on meter condition along with the daily reads, and a monthly summary of ICPs with missing and broken seals. From discussions with Simply Energy and Contact it appears that this information is not currently being reviewed, and I recommend that this is resolved. No meter condition events were identified for CTCS during the audit period.

Wells provides reports of ICPs with missing and broken seals monthly, which are reviewed. I viewed the reports for October 2019 to June 2020 and found there were no ICPs reported. Wells also provides a notes file with its readings which are imported into Salesforce. These are only reviewed where an issue is identified through the read attainment or validation processes. I recommend that events which could affect accuracy are routinely reviewed.

Description	Recommendation	Audited party comment	Remedial action
Meter condition information	CTCS /CTCX Ensure that meter condition information is received from MRS and reviewed to identify any events which could affect the accuracy of metering information. Review all meter condition information provided by Wells to identify any meter events which could affect accuracy.	Simply Energy will work with Contact on how we obtain a copy of the MRS report. Monthly reports from Wells are monitored for any inaccuracies.	Investigating

Customer reads

MRS and Wells only record reads that their readers have taken directly as actual readings.

Customers may provide customer and photo readings directly to Simply Energy. Customer supplied readings are entered into DataHub as customer actual if they have been validated against a set of readings from another source, and customer estimate if they have not been validated against a set of actual readings from another source. Validated customer actual reads are published and sent to EMS for use in the historic estimate calculations, and customer estimate reads are not published or sent to EMS.

There were no examples of customer or photo readings for CTCS or CTCX during the audit period. I reviewed examples of customer estimate and actual reads for other Simply Energy managed codes and found that the readings had been correctly classified as customer estimate or customer actual.

Audit outcome

Compliant

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

Code reference

Clause 6 Schedule 15.2

Code related audit information

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

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

Audit observation

The process of the application of meter readings was examined.

Audit commentary

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.

CTCT

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:

- one example of SAP sending an AMI midnight read incorrectly labelled for the event date rather than midnight the day before;
- some examples of reads being incorrectly labelled as estimates when they were actuals
- one example of SAP sending an incorrect actual read of zero. This was corrected through the RR process.

I walked through the process for NHH to HHR and HHR to NHH meter changes, including reviewing five examples of each. While this process achieves accuracy for submission information and ICP days, non-compliance exists because the NHH meter reading is not applied at 2400 on the day of the reading.

- For upgrades, the process is to “remove” the NHH meter from the registry and SAP on the day before the meter change, and then the ICP becomes HHR all day on the day of the meter change, with the trading periods up until the meter change being populated with zeros.
- The reverse applies for a downgrades, with the ICP treated as HHR all day on the date of the removal, with zeros populated until the end of the day and the NHH meter installed the following day.

Contact usually downgrades the submission type before meter changes for category one and two meters. Reports are used to identify ICPs which may require meter changes such as non-communicating AMI meters, meters with open service orders for meter changes, and Arc category two meters.

Smartco ICP 0000017802EAAC8 had readings recorded against the incorrect read date. Readings were received for two of the four registers on 18/06/20, and the AMI reads for the missing registers for 17/06/20 were entered into SAP against the open meter read order with a read date of 18/06/20. Where a read is not obtained on the meter read order date, SAP retrieves the nearest actual reading within the

last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. An exception is generated where the read dates do not match, but they are bulk closed without investigation.

CTCS

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** and compliance is confirmed.

Review of the event detail report confirmed that there were no upgrades or downgrades during the audit period.

CTCX

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** and compliance is confirmed.

Simply Energy only intends to complete submission type upgrades for category 1 and 2 meters once reliable HHR data is being received for the ICP. The upgrades will take effect from the first business day of the month. Downgrades will be processed in the same way if reliable HHR data is no longer available.

Review of the event detail report found there were two ICP upgrades during the audit period, and no downgrades. Both were metering category 1 or 2 ICPs which were changed from NHH to HHR submission type at midnight on the first day of the month. One upgrade was correctly processed, but ICP 0000022997EA768 had NHH end reads corresponding to the end of the first day as HHR sent to EMS because of a copy and paste error. Simply Energy intends to check and update the readings to ensure that all consumption is captured.

Meter	Date	Expected read (estimate on 31/03/20 at 23:59, because the actual reads were unvalidated)	Applied read (actual on 01/04/20 at 23:59)	Unvalidated reads on 31/03/20
219817391/1	31/03/2020	602.38	606.27	606.268
214387093/1	31/03/2020	22266.34	22304.91	22304.91
214387093/2	31/03/2020	5936.41	5932.76	5924.32

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.7 With: Clause 6 Schedule 15.2	<p>CTCT</p> <p>Incorrect switch event meter reads sent.</p> <p>NHH meter readings not applied at 2400 on the day of the meter reading for NHH to HHR upgrades and downgrades.</p> <p>Where a reading is not received for all registers on the meter read order date SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. This</p>

<div>From: 18-Jul-19</div> <div>To: 22-Jul-20</div>	<div>resulted in readings for two registers for ICP 0000017802EAC8 being recorded with incorrect read dates.</div> <div>CTCS</div> <div>Simply Energy supplied NHH end readings to EMS for ICP 0000022997EA768, which did not correspond to the end of the last NHH day for the ICP.</div> <div>Potential impact: None</div> <div>Actual impact: Low</div> <div>Audit history: Twice</div> <div>Controls: Moderate</div> <div>Breach risk rating: 2</div>		
Audit risk rating	Rationale for audit risk rating		
Low	<div>The controls are recorded as moderate overall because they will not consistently ensure that reads are recorded with the correct read date in situations where a read is not available on the meter read order date. Where reads are available on the meter read order date, or are not available on the meter read order date or the previous three days, reads will have the correct read date recorded.</div> <div>The controls over upgrades and downgrades are strong, and the controls over upgrade and downgrade meter readings provided to EMS are moderate due to the manual process.</div> <div>There is expected to be a minor impact on submission because some reads will be attributed to an incorrect date. There may be a minor impact on other participants if an ICP switches on an affected reading.</div>		
Actions taken to resolve the issue		Completion date	Remedial action status
CTCX			Identified
The end readings for ICP 0000022997EA768 have been amended and the correct values are now reconciled.			
Preventative actions taken to ensure no further issues will occur		Completion date	
CTCX			
No further action here.			

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

Code reference

Clause 7(1) and (2) Schedule 15.2

Code related audit information

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

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

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

Audit observation

The process to manage missed reads was examined, including review of reports used in the process and individual unread ICPs.

Contact provided lists of ICPs not read during the period of supply, where the period of supply had ended during the audit period. A sample of ten ICPs unread during the period of supply were reviewed.

Audit commentary

CTCT

Missing AMI data is monitored using the Smart Reads Dashboard by the field services team, and IMDM by the operations team. AMI files are held for three days, or until 100% of reads are obtained before import and estimation of missing data. If a whole file is missing, the field services team receives an email notification so that it can be followed up.

For non-AMI meters, the Automated Meter Reading Compliance (MRC) process applies. The process begins 130 days after an estimated read is entered, so ICPs supplied for shorter periods do not usually have any action taken, and the best endeavours requirement is unlikely to be achieved. The MRC process has the following steps:

- process initiation occurs on the day an estimated reading is entered,
- letter 1 is sent if the process is still active after 130 days,
- letter 2 is sent if the process is still active 70 days after letter 1 was issued,
- letter 3 is sent to advise that there are charges if a high priority read is requested,
- request a high priority (out of cycle) meter reading if the process is still active 70 days after letter 2 is issued, and
- a BEPM is raised if the process is still active 60 days after the high priority read is requested; the user attempts to gain a read and enter a permanent estimate if an actual reading cannot be obtained.

The MRC process is terminated when the customer switches out, is disconnected, an actual reading is received, or they are added to a meter reader exclusion list (due to a health and safety issue or not being allocated to an active meter reading route). The MRC process continues after customer reads are received.

Following the transition to MRS in July 2019, resourcing issues resulted in poor read attainment in some areas. To avoid sending letters to customers where reads should have been able to be obtained, no access letters were put on hold in December 2019 and have not been issued since. All open meter read compliance activities were cancelled on 23/01/20 and the process was restarted on the first estimate following 23/01/20 for each affected ICP. The process was also modified for COVID-19 to explain that Contact would not be reading meters during the lockdown and encourage customers to supply their own readings where possible.

Contact provided a list of ICPs not read during the period of supply, I found one ICP which had switched out and 229 ICPs had become inactive without a read during the period of supply. I checked the switched ICP and a sample of nine inactive ICPs and found that the best endeavours requirement was not met because the MRC process was not able to be completed during the period of supply. This is recorded as non-compliance below.

As recorded in the 2018 audit, the report of ICPs unread during the period of supply includes ICPs which are still within the period of supply. It can be sorted or filtered by end date to exclude the ICPs still supplied by Contact.

CTCX and CTCS

Simply Energy manages read attainment as an agent. When a customer is switching out, staff check whether the ICP has an actual read and if possible, try to obtain one. Daily AMI reads are received and recorded in Datahub.

Simply Energy monitors read attainment monthly, using the following reports:

- NRE (no read event) report**
 This report shows ICPs that have received no read event information from Simply Energy's agents. The events are reviewed, and appropriate action is taken. For instance, if the no read event indicates the property is demolished this is queried with the property manager or customer, and if the event indicates a key is required for access Simply Energy contacts the customer to arrange a key.
- Read KPI report**
 The read KPI report shows NHH settled AMI meters which have not been read since switch in, for more than 35 days, and meters which have not been read for more than 80 and 120 days. The report is reviewed, and appropriate action is taken to resolve the issues preventing read attainment with the MEP, customer, or Emersion team for CTCS. The report is prioritised by last actual read date.

If AMI readings cannot be obtained, and the MEP has advised that the communication issues will be difficult to resolve, Simply Energy will move the ICP to a manual Wells or MRS reading route.

No CTCX or CTCS ICPs were unread during the period of supply.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.8 With: Clause 7(1) and (2) Schedule 15.2 From: 01-May-19 To: 02-May-20	CTCT For at least ten ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met. 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	Controls are rated as weak as they are not sufficient to ensure the best endeavours requirement is met where the period of supply is less than nine months. The audit risk rating is low, as most of the ICPs without a read during the period of supply appear to have been supplied for a short period.

Actions taken to resolve the issue	Completion date	Remedial action status
<p>Contact acknowledges that the transitional stage of moving to a new meter reading provider (AD Riley) has taken significantly longer than anticipated. Up until recently our service provider has struggled to find the right resource model after onboarding a couple of decent sized customers (retailers). It's fair to say that the underlying resource issues and resulting volumes of 'attempted readings' are in far better shape (ICPs not attempted generally sitting around 1% on any week – excluding Covid) and this enables us to shift the focus towards attainment of successful readings.</p> <p>The impact of Covid 19 had also compounded our results in recent times with Contact and ADR having to suspend legacy meter reading during alert level 4 and more recently, for internal meters under level 3.</p> <p>Legacy meter reading challenges have been front of mind for us over the past 12 months and both Contact and ADR have implemented a number of notable items to ensure we're heading in the right direction. Some key improvements or controls are listed below:</p> <ul style="list-style-type: none"> • Contact has enhanced our NHH meter reading reports (both the 12 month and 4 month views) so that we are able to identify and target exception cases proactively. We have taken this to the next level and used the data to proactively engage with customers through a variety of channels (email/SMS) to attempt to gather meter readings, admittedly for billing accuracy purposes, however also enables us to capture important location and access information. We have also introduced smarter ways for customers to submit their own reads via the Contact App (although it is still an estimate read we are eliminating potential bill shock issues). Contact recently carried out targeted special reads on over 4,000 ICPs at customer properties to fulfil our 365 compliance obligations. • With resourcing issues now under control, Contact has initiated a specific programme of work to improve successful read attainment where we are seeing a higher number of 'no read cases' returned from our service provider. <p>ADR have also implemented new technology on the hand held RDA equipment such as;</p> <ul style="list-style-type: none"> • Priority scheduled read process; highlights to the reader if previous actual was not completed (therefore eliminated sequential read issue (other than true no access problems). • GPS coordinates (showing the meter reader a locational aid if the meter reader cannot find the meter) • Obtaining photographs when completing an actual reads – these are provided to Contact via a data base portal which helps with our internal validation processes. <p>While ADR has had some significant operational and resource tests they have risen to the challenge and reinforced our decision</p>	Ongoing	Identified

to utilise their ability to implement system solutions and use technology to improve the legacy meter reading function.		
Preventative actions taken to ensure no further issues will occur	Completion date	
Outlined above.	Ongoing	

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

Code reference

Clause 8(1) and (2) Schedule 15.2

Code related audit information

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

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

Audit observation

The 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.

A sample of ten ICPs not read in the previous 12 months were reviewed to determine whether reasonable endeavours were used to attain reads, and if exceptional circumstances existed.

Audit commentary

CTCT

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
Oct 2019	320	70	1,727	99.17%
Nov 2019	320	67	1,814	99.14%
Dec 2019	322	69	1,876	99.10%
Jan 2020	323	74	1,906	99.10%
Feb 2020	325	77	1,982	99.07%
May 2020	324	115	3,023	98.54%

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment. Following the transition to MRS in July 2019, resourcing issues resulted in poor read attainment in some areas and communications to customers regarding read attainment were temporarily suspended as a result. This combined with the COVID-19 lockdown, caused a decrease in 12 month read attainment from the average 99.3-99.4% found during the previous audit.

I reviewed ten ICPs not read in the previous 12 months determine whether exceptional circumstances exist, and if Contact had used their best endeavours to obtain readings:

- for three ICPs, the best endeavours requirements were met, or exceptional circumstances existed, and
- for seven ICPs, the best endeavours requirements were not met primarily due to temporary suspension of communications to customers regarding read attainment.

The 2017, 2018, and 2019 audits identified some accuracy issues within the ICP level and aggregated read attainment reporting. Contact provided an ICP level report as at 23/06/20 which was compared to the May 2020 summary report to determine whether the issues were resolved.

Report	Issue	Finding
ICP level report	<ol style="list-style-type: none"> 1. The read compliance reports appear to be based on the actual reads received, rather than the actual reads loaded in SAP. Each read must be entered against a valid read request. Where an estimated read is entered against the request prior to the actual being received, the actual read is not entered unless it is sufficiently different to require the invoice to be reversed and rebilled. 2. Where an ICP switches out and back in, the report is including the switched out period in the period of supply. 3. Prepay meters are not included in the report. Contact is intending to replace all legacy prepay meters with AMI meters by the end of 2019. 	<ol style="list-style-type: none"> 1. Cleared. If an actual reading is received without an open meter read order, it will be loaded in SAP as an actual but unbillable read and create a "MRO (meter read order) not found" exception. The reading will be used to generate historic estimate, and future invoice estimates but will not be used for billing. 2. I was unable to confirm whether the issue was cleared from the reports provided. 3. Cleared. Prepay meters do appear to be included in the report
Aggregated report	<ol style="list-style-type: none"> 1. The read rate percentage appears to be consistently rounded up. 2. The count of reads required to reach target appears to be calculated based on the percentage and consistently rounded down. 	<ol style="list-style-type: none"> 1. Still existing. 2. Still existing.

Copies of the meter reading frequency reports to the Electricity Authority for October 2019 to February 2020 were provided, and the reports were sent within 20 business days after the end of the month.

CTCS and CTCX

The first CTCX NHH ICP switched in effective 01/09/19 and the first CTCS ICP switched in effective 01/03/20. No NHH ICPs have been supplied for more than 12 months.

No meter reading frequency reports had been required for CTCS at the time the audit information was supplied.

Copies of the meter reading frequency reports for December 2019 to February 2020 were provided for CTCX, and the report content was compliant. I viewed emails to confirm that the reports were sent within 20 business days after the end of the month.

Review of Simply Energy's meter reading frequency reports for other codes they manage found that ICPs are sometimes included after their period of supply has ended (e.g. after they have switched out). I recommend that this is investigated and resolved.

Description	Recommendation	Audited party comment	Remedial action
Meter read frequency reporting	CTCS/ CTCX Ensure that only ICPs supplied at the end of the period being reported are included in the meter read frequency reporting.	The incorrect reporting of ICPs in the NHH Read Reports has been resolved.	Cleared

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.9 With: Clause 8(1) and (2) Schedule 15.2 From: Oct-19 To: Jul-20	CTCT For at least seven ICPs supplied for over 12 months, exceptional circumstances did not exist, and the best endeavours requirements were not met. There are some meter read frequency report accuracy issues. 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	Controls are rated as moderate because the MRC process is usually sufficient to ensure that the best endeavours requirement is met within 12 months, but parts of the process were temporarily suspended during the audit period. The audit risk rating is low, because 12 month read attainment is around 99%, and the report accuracy issues are expected to have a minor impact.		
Actions taken to resolve the issue		Completion date	Remedial action status
We acknowledge that the past 12 month NHH Mater annual interrogation process has not been to the standard as previous years. Actions taken as discussed in section 6.8 above.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Preventative actions taken as discussed in 6.8 above. We have also added a weekly update meeting with ADR (MRS) management team to ensure both parties are working together to bring the process back up the agreed SLAs.		Ongoing	

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.

A sample of ten ICPs not read in the previous four months at NSPs where less than 90% of ICPs were read were reviewed to determine whether exceptional circumstances existed and if Contact had used their best endeavours to obtain readings.

Audit commentary

CTCT

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
Oct 2019	326	82	14,482	93.89%
Nov 2019	328	107	18,791	92.18%
Dec 2019	328	93	16,361	93.13%
Jan 2020	330	89	15,842	93.44%
Feb 2020	331	72	13,162	94.57%
May 2020	332	87	15,969	93.08%

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment. Following the transition to MRS in July 2019, resourcing issues resulted in poor read attainment in some areas and communications to customers regarding read attainment were temporarily suspended as a result. This combined with the COVID-19 lockdown, caused a decrease in four month read attainment from the average 98-98.4% found during the previous audit.

I reviewed ten ICPs not read in the previous four months at NSPs where less than 90% of ICPs were read, as at February 2020 to determine whether exceptional circumstances exist, and if Contact had used their best endeavours to obtain readings:

- for two ICPs, the best endeavours requirements were met, or exceptional circumstances existed, and
- for eight ICPs, the best endeavours requirements were not met primarily due to temporary suspension of communications to customers regarding read attainment.

CTCX

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
Dec 2019	1	-	-	100%
Jan 2020	1	-	-	100%
Feb 2020	1	-	-	100%

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment. No ICPs were unread in the previous four months.

CTCS

The first NHH ICP switched in effective 01/03/20 and no meter reading frequency reports had been required for CTCS at the time the audit information was supplied.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 6.10</p> <p>With: Clause 8(1) and (2) Schedule 15.2</p> <p>From: Oct-19</p> <p>To: May-20</p>	<p>CTCT</p> <p>For at least eight ICPs supplied for over four months, exceptional circumstances did not exist, and the best endeavours requirements were not met.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>Controls are rated as weak because the MRC process is not sufficient to ensure that the best endeavours requirement is met within four months.</p> <p>The audit risk rating is low, because four month read attainment is around 93% and is expected to improve.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
As per section 6.8 and 6.9 above, we acknowledge that NHH meters 90% read rate has dropped this year and COVID19 impacted the process during the earlier quarter of 2020. We are actively working with our meter reading provider (ADR/MRS) to ensure that the four month read attainment process improves as quickly as possible.	Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<ul style="list-style-type: none"> New internal controls added such as better reports showing sequential estimated reads (as well non read codes used) ADR sends a monthly Stats report which is reviewed in our management meeting (with ADR) Weekly meetings with ADR team (which include an action register) to ensure both parties are working on valued betterment processes. <p>Current quarter: Our stats show that attainment levels have been improving steadily through the past quarter – the only negative will relate to Auckland Covid19 level 3 lockdown, which stopped the meter readers from reading meter that were located inside properties.</p>	Ongoing	

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

NHH data is collected by MEPs and agents. The data interrogation log requirements were reviewed as part of their agent and MEP audits.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11(1) Schedule 15.2

Code related audit information

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

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

Audit observation

CTCT

HHR data is collected by EDM I, AMS and EMS. HHR data collection was reviewed as part of their agent audits.

Generation data is collected by Contact. Processes to provide HHR generation information were reviewed, including tracing a sample of data from MV90/Oracle through to SAP and confirmed that it was recorded correctly.

CTCS and CTCX

Up to 31/05/20 HHR volumes were collected by EMS. From 01/06/20 AMS and EDM I have provided HHR data directly to Simply Energy.

HHR data for ICP 0000018218HRB13 was provided by Contact for the June 2020 initial submission. The switch was later withdrawn.

Audit commentary

CTCT

HHR data

Compliance with this clause has been demonstrated by AMS and EDM I as part of their agent audits.

Generation data

Contact collects generation data via the services access interface. Back-up meters are installed at every generation installation, which eliminates the requirement for manual data interrogation, and processes have therefore not been established for this activity. The backup meters are off the same measuring transformers. There are also backup Scada installations with separate CTs, VTs and meters.

CTCS and CTCX

Compliance is recorded in the AMS, EDM I and EMS agent audit reports.

The HHR data for ICP 0000018218HRB13 was obtained from the meter by Contact and provided to Simply Energy. The switch was withdrawn after the initial submission and revision data will be provided by CTCT.

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

CTCT

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

Generation data is collected by Contact. Interrogation logs for generation station metering were viewed.

CTCS and CTCX

Up to 31/05/20 HHR volumes were collected by EMS. From 01/06/20 AMS and EDM have provided HHR data directly to Simply Energy.

HHR data for ICP 0000018218HRB13 was provided by Contact for the June 2020 initial submission. The switch was later withdrawn.

Audit commentary

CTCT

HHR data

Compliance with this clause has been demonstrated by AMS and EDM as part of their agent audits.

Generation data

The following information is collected during each automated interrogation of HHR generation metering:

- the unique identifier (serial no) of the meter or data logger,
- the connection time, disconnection time and recorder time,
- the half-hour metering information for each trading period, and
- the events log.

Event log information is provided to the appropriate generation station for review. If any actions are required, the instruction will be provided by generation engineers as required.

CTCS and CTCX

Compliance is recorded in the AMS, EDM, and EMS agent audit reports.

The HHR data for ICP 0000018218HRB13 was obtained by Contact, and HHR interrogation log information was obtained as described above. The switch was withdrawn after the initial submission and revision data will be provided by CTCT.

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

CTCT

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

Generation data is collected by Contact. Interrogation logs for generation station metering were reviewed.

CTCS and CTCX

Up to 31/05/20 HHR volumes were collected by EMS. From 01/06/20 AMS and EDM have provided HHR data directly to Simply Energy.

HHR data for ICP 0000018218HRB13 was provided by Contact for the June 2020 initial submission. The switch was later withdrawn.

Audit commentary

CTCT

HHR data

Compliance with this clause has been demonstrated by AMS and EDM as part of their agent audits.

Generation Data

For generation metering an interrogation log is generated to record details of all interrogations and the audit confirmed that appropriate action is taken where problems are apparent.

The interrogation log contains the following information:

- the date of interrogation,
- the time of commencement of interrogation,
- the operator identification (for non-scheduled data collection),
- the unique identifier of the meter or data logger,
- the clock errors outside the range specified in clause 12, and
- the method of interrogation.

CTCS and CTCX

Compliance is recorded in the AMS, EDM I and EMS agent audit reports.

The HHR data for ICP 0000018218HRB13 was obtained by Contact, and HHR interrogation log information was obtained as described above. The switch was withdrawn after the initial submission and revision data will be provided by CTCT.

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

Trading period duration was reviewed as part of the MEP audits and agent audits.

Contact's clock synchronisation process ensures that trading period duration for generation meters is normally 30 minutes within ± 2 seconds.

Audit commentary

Compliance with this clause has been demonstrated by the agents and MEPs and is discussed in their audit reports.

Contact's clock synchronisation process for generation meters is discussed in **section 6.5**.

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

Processes to archive and store raw meter data were reviewed.

Audit commentary

Compliance with this clause has been demonstrated by Contact's MEPs and agents.

CTCT

Contact's IT team confirmed that raw meter read data is retained for more than 48 months, and I viewed reading data that had been retained for over 48 months during the audit.

I viewed audit trails in SAP, IMDM, HDM, and MV90 and confirmed that read and volume data cannot be modified without an audit trail being created. Access to Contact's systems is restricted using logins and passwords.

CTCX and CTCX

Simply Energy intends to retain raw meter data indefinitely.

Access to systems is restricted using logins and passwords and I confirmed that read and volume data cannot be modified without an audit trail being created.

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 archive and store non-metering data were reviewed.

Audit commentary

CTCT

The main non-metering information is on/off time logs for distributed unmetered load and SCADA records supporting on/off times for NHH profiles. This data is received in a password protected email and loaded into SAP to create interval profiles.

The data is stored securely and retained indefinitely, I viewed data from January 2015 during the audit.

CTCX

CTCX will not deal with any non-metering information.

CTCS

CTCS will deal with some non-metering information for DUMML ICPs. EMS will retain the data logger files, and compliance is recorded in their agent audit report.

Simply Energy will retain DUMML information provided by database owners indefinitely.

Audit outcome

Compliant

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

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

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

If a reconciliation participant detects errors while validating non-half hour meter readings, the reconciliation participant must:

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

19(1)(b) - replace the original meter reading the second meter reading (even if the second meter reading is at a different date)

19(1A) if a reconciliation participant detects errors while validating non half hour meter readings, but the reconciliation participant cannot confirm the original meter reading or replace it with a meter reading from another interrogation, the reconciliation participant must:

- *substitute the original meter reading with an estimated reading that is marked as an estimate;*
- and*
- *subsequently replace the estimated reading in accordance with clause 4(2)*

Audit observation

Processes for correction of NHH meter readings were reviewed, including checking examples of corrections where available. Corrections to volumes where meter readings match the value recorded by the meter, such as where a multiplier is incorrect, a meter is defective or bridged, or inactive consumption is identified were reviewed in **section 2.1**.

Audit commentary

CTCT

Where errors are detected during validation of non-half hour meter readings, a check reading is performed, or AMI data is checked. If an original meter reading cannot be confirmed, then an estimated reading is used and is labelled as an estimate in SAP.

Transposed meters are identified through the implausible read validations. These are typically reviewed by a Bot, which will request a control read. The control read is returned to a user for validation. Once the correct reads are confirmed, a device modification is carried out to ensure that reads are recorded against the correct register.

CTCS and CTCX

Simply Energy manages NHH corrections as an agent.

Where errors are detected during validation of non-half hour meter readings, a check reading is performed, or AMI data is checked. If an original meter reading cannot be confirmed it is invalidated and an estimated reading is applied for billing. Estimated readings are ignored by the historic estimate calculation process; if no validated actual readings are available, forward estimate will be created.

If a reading is invalidated before being sent to MADRAS, the read will not be sent. If the reading is invalidated after being sent to MADRAS it will be updated using the read replacement process discussed in **section 12.3**.

If transposed meters are identified through the validation process, they will be corrected using the read renegotiation process if switch reads are affected, or by moving the readings to the correct registers.

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 a reconciliation participant detects errors while validating half hour meter readings, the reconciliation participant must correct the meter readings as follows:

19(2)(a) - if the relevant metering installation has a check meter or data storage device, substitute the original meter reading with data from the check meter or data storage device; or

19(2)(b) - if the relevant metering installation does not have a check meter or data storage device, substitute the original meter reading with data from another period provided:

- (i) The total of all substituted intervals matches the total consumption recorded on a meter, if available; and*
- (ii) The reconciliation participant considers the pattern of consumption to be materially similar to the period in error*

Audit observation

Processes for correction of HHR meter readings were reviewed. Three HHR corrections were reviewed, including a check that updated consumption data flowed through to revision reconciliation submissions.

Processes for the correction of generation data were reviewed, including walking through a correction.

Audit commentary

CTCT

HHR meter data

EDMI does not provide any data estimates or corrections. In some circumstances AMS may provide information used to prepare estimates and corrections.

I reviewed three examples of corrections including:

- a correction to move data from a back up to main meter where the main meter was switched off during maintenance,
- a correction for a reverse running event following customer tampering where AMS provided assistance with estimation of data for the affected period, which Contact validated and then applied, and
- a correction for understated data during a period where the meter was reprogrammed.

All corrections checked were processed accurately, and the estimates applied were reasonable. In all cases an appropriate audit trail was created, and following correction, the original data was still available.

Contact's validation processes identified an issue with Smartco's HHR AMI data following the end of daylight savings in April 2019. The first trading period was replaced with zero values. Contact obtained corrected data from AMS (who provides information for Smartco's meters) and I confirmed that corrections have been processed, and revised data was provided to the reconciliation manager.

HHR DUML data

DUML submissions are calculated in SAP based on a monthly snapshot of wattage information provided by the database owner and logger hours (where available). Festive lights are included in the wattages when they are connected. The logger hours are checked for completeness and reasonableness, and the dataset is validated through the HHR validation process.

Corrections occur as required for HHR DUML data, and no corrections have occurred over the past year. If unmetered wattage or on hours are updated in SAP, and the invoice or invoices for the affected period are reversed and rebilled, the revised data will flow through to revision submissions.

Generation data

Where errors are detected during validation of half-hour generation metering information the first course of action is to use data from back-up metering that is installed at all metering installations. In the unlikely event that back-up data is not available, estimation is performed using SCADA data. Corrections are made based on instructions from generation engineers.

I checked two generation data corrections, and found the corrections were accurate. The revenue correction journal information was available, but not in a single location. During the audit Contact updated its processes to ensure that its manual correction journals store all the required audit trail information in one place, as discussed in **section 2.4**.

CTCS and CTCX

Up to 31/05/20:

- for CTCX, EMS created HHR submissions, including temporary estimates, permanent estimates, and corrections, and compliance is recorded in EMS' agent audit report, and
- for CTCS, EMS collected and validated HHR data and created any permanent estimates and corrections required, supplied the validated HHR data including estimates and corrections to Simply Energy in EIEP3 format and this data was used to create HHR submissions.

From 01/06/20, EDMl and AMS began supplying HHR data directly to Simply Energy. Simply Energy creates HHR submissions, including temporary estimates, permanent estimates, and corrections.

Corrections are calculated manually and imported into Datahub in an EIEP3 file. A compliant audit trail entry is added into the permanent estimate log.

No corrections were required for CTCX during the audit period. I reviewed the one correction required for CTCS relating to a meter change, and found it was processed correctly and the data flowed through to the revision submissions.

Audit outcome

Compliant

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

Code reference

Clause 19(3) Schedule 15.2

Code related audit information

A reconciliation participant may use error compensation and loss compensation as part of the process of determining accurate data. Whichever methodology is used, the reconciliation participant must document the compensation process and comply with audit trail requirements set out in the Code.

Audit observation

Error and loss compensation was discussed, and the processes in place reviewed.

Audit commentary

Contact does not deal with any loss and compensation arrangements. If a compensation arrangement was in place, this would be identified through the load check process employed at the time of certification or recertification.

Audit outcome

Compliant

8.4. Correction of HHR and NHH raw meter data (Clause 19(4) and (5) Schedule 15.2)

Code reference

Clause 19(4) and (5) 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:

19(5)(a)- the date of the correction or alteration

19(5)(b)- the time of the correction or alteration

19(5)(c)- the operator identifier for the person within the reconciliation participant who made the correction or alteration

19(5)(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

19(5)(e)- the technique used to arrive at the corrected data

19(5)(f)- the reason for the correction or alteration.

Audit observation

Corrections are discussed in **sections 8.1** and **8.2**, which confirmed that raw meter data is not overwritten as part of the correction process. Audit trails are discussed in **section 2.4**.

Raw meter data retention for MEPs and agents was reviewed as part of their own audits.

Audit commentary

Compliance with this clause has been demonstrated by Contact's MEPs and agents.

I reviewed journals for NHH, HHR, and generation data corrections for all codes and noted that they were compliant with the requirements of this clause.

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

A sample of reads and volumes were traced from the source files to Contact's systems in **section 2.3**.

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

Correct identification of estimated reads, and review of the estimation process was completed in **sections 8.1** and **8.2**.

Audit commentary

Readings are clearly identified as required by this clause.

CTCT

Smartco ICP 0000017802EAAC8 had some readings recorded against the incorrect read date, and because there was no actual reading on that date the reads effectively had an incorrect type. Readings were received for two of the four registers on 18/06/20, and the AMI reads for the missing registers for 17/06/20 were entered into SAP against the open meter read order with a read date of 18/06/20.

Where a read is not obtained on the meter read order date, SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. An exception is generated where the read dates do not match, but they are bulk closed without investigation.

One example found of actual reads for the switch event date incorrectly labelled as estimates for ICP 0000001367NT0F7 as detailed in **section 4.3**.

CTCX

The downgrade for ICP 0000022997EA768 had NHH end reads corresponding to the end of the first day as HHR sent to EMS because of a copy and paste error. Simply Energy intends to check and update the readings to ensure that all consumption is captured.

Meter	Date	Expected read (estimate on 31/03/20 at 23:59, because the actual reads were unvalidated)	Applied read (actual on 01/04/20 at 23:59)	Unvalidated reads on 31/03/20
219817391/1	31/03/2020	602.38	606.27	606.268
214387093/1	31/03/2020	22266.34	22304.91	22304.91
214387093/2	31/03/2020	5936.41	5932.76	5924.32

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 9.1</p> <p>With: Clause 3(3) Schedule 15.2</p> <p>From: 18-Jul-19</p> <p>To: 22-Jul-20</p>	<p>CTCT</p> <p>Where a reading is not received for all registers on the meter read order date SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. This resulted in readings for two registers for ICP 0000017802EAAC8 being recorded with incorrect read dates and types.</p> <p>One incorrect actual read labelled as an estimate in a CS file.</p> <p>CTCX</p> <p>Simply Energy supplied NHH end readings to EMS for ICP 0000022997EA768, which did not correspond to the end of the last NHH day for the ICP.</p> <p>Potential impact: None</p> <p>Actual impact: Low</p> <p>Audit history: Twice</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>The controls are recorded as moderate overall because they will not consistently ensure that reads are recorded with the correct read date and type in situations where a read is not available on the meter read order date. Where reads are available on the meter read order date, or are not available on the meter read order date or the previous three days, reads will have the correct read date recorded.</p> <p>The controls over upgrade and downgrade meter readings provided to EMS are moderate due to the manual process.</p> <p>There is expected to be a minor impact on submission because some reads will be attributed to an incorrect date. There may be a minor impact on other participants if an ICP switches on an affected reading.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>This issue only occurs for a small number of AMI meters where the communication performance is intermittent therefore no read was delivered for the scheduled meter read date. Unfortunately SAP is not able to amend the scheduled meter read date as it is associated with a corresponding billing order. We have identified an enhancement to SAP that would resolve this issue and we are awaiting prioritisation of this solution</p> <p>CTCX</p> <p>The NHH end readings for ICP 0000022997EA768 have been resolved and are now reconciled accurately.</p>		TBC	Investigating

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

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

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

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

Audit observation

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

NHH data is collected by MEPs and agents, and HHR data is collected by agents. CTCT retrieves HHR data from the generation meters.

EMS reports generation data to the reconciliation manager as CTCT's agent. Their processes for HHR data were reviewed as part of their agent audit.

Audit commentary

The MEPs and agents retain the raw, unrounded data. Compliance with this clause has been demonstrated by as part of their own audits, except for EDMl. EDMl provides data to Contact in the HHRDM format, which records volumes in kWh rounded to two decimal places. Data is normally received from meters in either whole watt hours (equivalent to kWh to three decimal places) or kWh to

three decimal places. In addition, some EM5300 meters have been configured to provide a higher degree of precision, and fractions of watt hours (or kWh to four decimal places) are recorded.

EDMI's HHRDM file format may round the trading period data to two decimal places if the meter does not have a multiplier and the volume for that hour has a non-zero value in the third decimal place or an EM5300 meter is present. The affected ICPs are:

- 0000252214UN7AA – CTCT
- 0000443051UNA61 – CTCT
- 0320681548LCD8D – CTCT
- 0392681897LCCA1 – CTCT
- 0148393039LC121 – CTCT
- 0349732027LCC76 – CTCT
- 0236623230LC76C – CTCT
- 0375257284LCAA5 – CTCT
- 0100014259LCCDD – CTCT
- 0000096012TCCB8 – CTCT
- 0394861027LC6EC – CTCT
- 0219811938LC7EC – CTCT
- 0281457492LCFFB – CTCT
- 0000450356WPA6F – CTCS
- 0002540932TG9F9 – CTCS
- 0000492025WP701 – CTCS
- 0011201018ELB45 – CTCS
- 0000964120TEB3C – CTCS, and
- 0255886705LC7F1 – CTCS.

CTCT

NHH reads and HHR interval data is not rounded or truncated on import. The number of decimal places recorded in SAP matched the source files for the sample of data checked.

For generation data I traced a sample of reads from MV90 to SAP for one day and confirmed that reading data is recorded with eight decimal places in both systems. Generation meter data is not rounded or truncated on import.

CTCX and CTCS

NHH reads provided by FCLM and WASN are not truncated on import. The number of decimal places recorded in Datahub matched the source files for the sample of data checked. NHH readings from other agents and MEPs are truncated on import if they are provided with decimal places.

NHH customer readings are not consistently entered into Datahub with decimal places where this information is provided by the customer.

All NHH readings are rounded to the nearest whole number when exported to EMS' MADRAS for reconciliation.

HHR interval data is not rounded or truncated on import. The number of decimal places recorded in Datahub matched the source files for the sample of data checked.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 9.3</p> <p>With: Clause 3(5) of schedule 15.2</p> <p>From: 01-Sep-19</p> <p>To: 22-Jul-20</p>	<p>CTCS and CTCX</p> <p>EDMI provides HHR interval data for some ICPs rounded to two decimal places.</p> <p>NHH raw meter data received from all MEPs and agents except FCLM and WASN is rounded upon receipt into Datahub and not when volume information is created if it is provided with decimal places.</p> <p>Customer readings are not consistently entered into Datahub with decimal places where this information is provided by the customer.</p> <p>Any NHH data recorded with decimal places in Datahub is rounded to the nearest whole number when exported to EMS' MADRAS for reconciliation.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are considered weak, because all NHH meter information is rounded before it is entered into MADRAS where reconciliation submissions are calculated.</p> <p>The audit risk rating is low, because only NHH meter readings provided with decimal places are affected.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact will engage with EDM I to address the precision issue relating to the interval data files provided by EDM I to the respective Contact settlement systems.		Dec 2020	Identified
Changes to all read files has already been actioned to allow consistency through the Simply Energy systems. This data also flows to MADRAS so this is also updated as part of the change.		01/09/2020	
Preventative actions taken to ensure no further issues will occur		Completion date	
No further action is required.		01/09/2020	

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 and the SAP Functional Specification Replacement Value Procedures (V1.1) and Simply Energy's estimation documentation and were reviewed.

Estimates for generation stations are rare due to the high degree of metering accuracy and use of check metering as described in **section 9.6**. No examples of generation data estimates were identified during the audit period.

Audit commentary

CTCT

HHR data

HDM identifies missing HHR data. Estimates can be entered by running HDM's own estimation process for the ICP, or manually calculating an estimate and importing the file. Estimates are based on midnight readings where available, and historic data. There is a peer review of all estimates over 1,000 kWh.

Data is only exported from HDM to SAP when there is full dataset which has been validated and flagged as "good". If data is missing in SAP prior to generation of HHR submissions, SAP's estimation process will fill the missing trading periods.

SAP's replacement value procedures will estimate trading period data where validated data has not been received from HDM. The estimation process is based on historic meter data, or a linear value if no historic data is available.

The HDM and SAP processes are considered compliant with the requirement to use reasonable endeavours to ensure the estimated data is accurate to within 10%. Estimates are replaced with actual data if it becomes available.

I viewed seven examples where missing HHR data was temporarily or permanently estimated and confirmed that the reasonable endeavours requirements were met:

- for one estimate zeros were estimated after Contact confirmed that the electricity supply was disconnected,
- for four ICPs estimates were based on the consumption for a period which was expected to be similar,
- one ICP had data received from EDM I flagged as estimated, because the data was provided as a manual download and some information required for validation (time and meter event information) was not received, and
- for one ICP data could not be obtained during lockdown, and consumption was estimated based on the ICPs history in consultation with the customer because the usage profile had changed during lockdown.

Generation data

Estimates are fairly rare for generation metering. The generation engineers provide compensated data from the secondary metering at the station when estimates are required. No estimates occurred during the audit period.

CTCS and CTCX

Up to 31/05/20:

- for CTCX, EMS created HHR submissions, including temporary estimates, permanent estimates, and corrections, and compliance is recorded in EMS' agent audit report,
- for CTCS, EMS collected and validated HHR data and created any permanent estimates and corrections required and supplied the validated HHR data including estimates and corrections to Simply Energy in EIEP3 format, this data was used to create HHR submissions, and no temporary estimates were created.

From 01/06/20, EDMI and AMS began supplying HHR data directly to Simply Energy. Simply Energy creates HHR submissions, including temporary estimates, permanent estimates, and corrections.

Temporary estimates are created by Datahub and the process is triggered manually for each ICP with missing data. ICPs with missing data are identified using Datahub exception reports. Estimates are based on historic information for an equivalent day and trading period, unless other data such as check metering is available to confirm the correct values. The estimation methodology sets out how equivalent days are determined, and accounts for working days, non-working days, daylight savings beginning and ending, and public holidays. Some improvements to the estimation process are recommended.

- HHR midnight readings are not considered as part of the estimation process. Some MEPs routinely provide HHR midnight readings, and it is recommended that these readings should be considered by the estimation process where they are available.
- Where there is insufficient history to determine an equivalent day (e.g. for a new ICP switching in) an estimate must be manually created. Use of a default value is recommended, to ensure that estimates are completed on time where there may be large numbers of new ICPs requiring estimates.

Volumes are identified as F (final actual), E (estimated) or D (deleted) in Datahub at trading period level. Permanent estimates are created in Datahub by importing a new file with the permanent estimate data marked as F (final). Permanent estimates can be identified at trading period level using the permanent estimate log, which is updated manually when permanent estimates are created as described in **section 8.4**. Temporary estimates are marked as E (estimated) at trading period level.

No temporary estimates were created prior to June 2020. In June 2020, the temporary estimate process was scheduled, but was not completed. The process was delayed while Simply Energy and Contact resolved issues relating to ICP 0000018218HRB13, which was included on a list of ICPs to switch from CTCT to CTCS in error. By the time it was decided not to withdraw the switch and include it in CTCS' submission, it was too late to run the estimate process which takes several hours. The missing estimates led to some submission accuracy issues because ICPs with missing data were excluded from the HHR volumes and ICP days submissions. The temporary estimate processes have now been run, and any missing trading periods will be estimated for revision submissions. I viewed examples of these estimates, and found the estimated volumes flowed through to the HHR aggregates and volumes revision submissions, and ICP days were reported correctly.

When trading period data has been estimated and actual data is received later, the actual data is imported and validated against the estimates. If the actual data is higher than the estimated data, it replaces the estimates. If the actual data is lower than the estimated data, it is not validated and does not replace the estimates. Although I did not find any examples of actual data not replacing estimates for CTCS or CTCX during the audit period, I did find evidence of this for other Simply Energy managed codes and recommend below that all estimates are replaced with actual data if available.

When actual trading period data has been received and updated actual data is received later, it will be replaced. Where an MEP has provided a part day of data, they may later provide a replacement file

which contains nulls for the trading periods already provided and HHR volumes for the part of the day that was originally missing. I found that where this occurs, Datahub imports the whole replacement file, which replaces the actual data originally provided with the null values. Datahub then creates estimates for the missing periods. Although I did not find any examples of this issue for CTCS or CTCX during the audit period, I did find evidence of this for other Simply Energy managed codes and recommend below that where partial replacement data is provided, only periods with valid replacement data should be updated.

When data is replaced, compliant audit trails are created within Datahub's job log. When a permanent estimate is created, the permanent estimate log is manually updated to record all details of the change, including the dates and trading periods affected and the correction method.

Recommendation	Description	Audited party comment	Remedial action
HHR estimation process	CTCS and CTCX Take HHR midnight readings into account (if available) when calculating HHR estimates.	HHR midnight readings are taken into consideration on all received AMI data. We are currently investigating the issue that the auditor raised around actuals not replacing estimates.	Investigating
HHR estimation timeliness	CTCS and CTCX Complete the HHR estimation process prior to business day 4, to ensure that estimates are included in submission data.	Process has been updated to run now on the end of day Business Day 3.	Identified
HHR estimation for new ICPs	CTCS and CTCX Improve the HHR estimation process so that Datahub can apply estimates where data for an equivalent day is not available.	A ticket has been raised with our Service Provider to investigate and resolve this issue.	Investigating
Replacement of estimates with actual data	CTCS and CTCX If actual data is received for periods which have been estimated, ensure that the estimates are replaced with the actual data.	This is currently under investigation with our Service Provider to investigate and resolve.	Investigating
Replacement of actual data with actual data	CTCS and CTCX If partial replacement data is provided, ensure that only the periods with valid replacement data are updated in Datahub.	We are revisiting this issue with both FCLM and our Service Provider.	Investigating

There was a difference of 35,912 kWh between the volumes and aggregates submissions for CTCS for the June 2020 initial submission. There was missing data for seven days at BRB0331 and two days at

BRK0331 which caused the HHR aggregates submission to fail the file checker validation. Due to time constraints, Simply Energy took the nearest day's data for the aggregation row and applied it for the missing days. For BRB0331, the missing data occurred because a meter replacement had not been processed, and the line used to populate the missing days had zeros recorded after the meter replacement time and did not provide a reasonable estimate of what the consumption is expected to be for the missing trading periods. The aggregates file and ICP days file were not modified due to a lack of time. The estimated data was replaced with actuals by revision 1, and the HHR volumes and aggregates files were consistent.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 9.4</p> <p>With: Clause 3(5) of schedule 15.2</p> <p>From: 01-Sep-19</p> <p>To: 22-Jul-20</p>	<p>CTCS and CTCX</p> <p>HHR estimates were not consistently created where HHR trading period data was missing. Estimates were created for revision submissions.</p> <p>CTCS</p> <p>Some HHR volumes estimates for CTCS did not meet the reasonable endeavours requirements for June 2020. The estimated data was replaced by revision 1.</p> <p>Potential impact: High</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>		
Audit risk rating	Rationale for audit risk rating		
Medium	<p>The controls are rated as moderate because there is a process in place, but some improvement is required to ensure compliance.</p> <p>The audit risk rating is medium, the CTCS customer base is expected to grow which will increase the risk of future non-compliance because the estimation process is partly manual.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Moving the temporary estimation process to BD3 will now allow enough time to perform this task. The July 2020 non-compliance was mostly impacted by the generation site sent through around midday on BD4.		01/09/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Bringing the temporary estimate process forward will prevent further issues.		01/09/2020	

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

Code reference

Clause 16 Schedule 15.2

Code related audit information

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

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

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

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

16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected 0 values.

Audit observation

I reviewed and observed the NHH data validation process, including checking a sample of data validations. I reviewed system and process documentation, to confirm validation settings and procedures for readings which have failed validation.

Audit commentary

CTCT

Data validation for NHH metering information occurs at multiple levels.

Meter reader validation

For meters manually interrogated by MRS, a validation within their hand-held device identifies readings outside specified high/low parameters and prompts the reader to check the reading. This process is discussed further in the agent audit report.

MRS also check the condition of the meters, to identify issues that could affect meter accuracy or safety. If an issue is identified, the appropriate condition code is entered into the hand-held device and provided to Contact. This process is discussed further in **section 6.6**.

AMI validation

For AMI meters, the MEPs have access to meter event and clock synchronisation information that may identify issues with meter accuracy. The process to receive and review this information is discussed in **section 9.6**.

Read import and billing validation

Contact's file import process identifies any file errors or corruption and creates an exception.

Once successfully imported, the billing validations identify any consumption outside prescribed limits and creates an exception. There are different limits for AMI and standard meters. A summary of the validations is set out below:

Validation type	Description
Implausible reads	High consumption Extra high consumption Low consumption

Validation type	Description
Negative consumption	Negative consumption
Zero consumption	Zero consumption for the previous month
Vacant and disconnected consumption	Vacant consumption >0 units Disconnected consumption >2 units
Billing period	Short or long bill period
Bill value	Billed dollar value outside of tolerance

When exceptions are created, they are assigned to users or robots (Bots) as BPEMs. Bots primarily process implausible read, zero consumption and bill value exceptions, and approve them based on a set of rules or request a control read. For instance, if an implausible read is the first reading after a switch gain read the Bot will issue a request for a control (out of cycle) meter reading.

I saw evidence that in some cases, Bots validated readings which had been moved to an implausible status by a user because they required investigation. Contact has raised a defect to investigate why this occurred.

Exceptions not validated by the Bots and returned control readings are directed to work queues. Users investigate each exception, starting with the oldest and highest priority exceptions. If an exception is not resolved on the first day because it requires further investigation, the BPEM will remain until it is resolved. If a BPEM will require later follow up (such as when a control read is requested), the user can set the BPEM status to pending and specify a number of days, after which time the BPEM will reappear in the user's main queue. This process helps to prevent double handling.

Each type of exception is assigned to four or five primary users, to ensure that several team members are familiar with the process to cover absences. The Operations Team Leader (Billing) monitors overdue service orders and BPEMs and the total number of service orders and requests daily, and takes action to follow up and redistribute tasks if required. Summary reporting of open service orders, performance and workloads is reviewed weekly.

Upon changing meter read providers to MRS there was a drop in read attainment and control read attainment due to resourcing issues. This resulted in reads being estimated for several months for some ICPs, which caused an increase in the number of implausible read exceptions once reads were received. Read attainment is still affected by COVID-19 but expected to continue to improve, and control reads are able to be obtained to aid read validation.

Consumption on disconnected ICPs is monitored by the reconciliation and revenue assurance teams. The reconciliation team processes corrections to ensure that any disconnected consumption is included in reconciliation submissions. This process is discussed in **section 8.1**.

Legacy meters with zero consumption for more than 90 days and AMI meters with zero consumption for more than 120 days are monitored by the revenue assurance team. I reviewed the legacy and AMI meter reports and noted that review was underway for the affected ICPs to confirm whether the zero consumption was genuine or there was a possible meter fault which required action.

Contact is phasing out its legacy pre-pay meters and has 172 remaining as at 22/06/20. Pre-pay no vend reports are reviewed weekly to identify pre-pay ICPs which are blocked (not vending), and 62 ICPs had no vend in the previous three months up to 22/06/20. Most of the long term no vend sites have been visited in the last 12 months and where possible upgraded to AMI metering. There are some sites where Contact has been unable to gain access to change the meter, and Contact is working with their

legal team to resolve this. It was intended that all legacy pre-pay meters would be replaced by the end of July 2020, but the process has been delayed by COVID-19 restrictions.

There are over 8,000 AMI prepay meters, which use midnight readings to calculate consumption and the credit balance. When no credit is available and remote disconnection request is created, and the meter is reconnected once credit is added.

CTCS and CTCX

Data validation for NHH metering information occurs at multiple levels and is managed by Simply Energy.

Meter reader validation

As discussed in **section 6.6**, MRS and Wells validate readings and check meter condition when readings are obtained but this information is not consistently reviewed.

For AMI meters, the MEPs have access to meter event and clock synchronisation information that may identify issues with meter accuracy. The process to receive and review this information is discussed in **sections 6.5 and 9.6**.

Read import and billing validation

Simply Energy's NHH validation process is compliant. The import process checks:

- the reading relates to a valid ICP meter and register, and
- the content of each field is valid and not corrupted, including dates and times.

The meter reading validations check:

- the reading date falls between the data stream's opening and closing date,
- the reading is consistent with the number of dials recorded,
- whether the reading is higher than previous reads, which identifies negative consumption,
- whether the meter has rolled over, and
- consumption between reads against the estimated forward daily kWh to identify high, low, or zero consumption.

Any ICPs which fail the validation are individually reviewed. The user can manually force a read to pass validation so that it is published and available for reconciliation and billing or leave the read as unvalidated. During Simply Energy's audit, I found that the validation process would fail actual readings because they are lower than previous estimates. In these cases, it is more likely that the estimated readings will be incorrect than the subsequent actual readings.

Description	Recommendation	Audited party comment	Remedial action
Validation of actual reads lower than previous estimates	<p>CTCS and CTCX</p> <p>Review the validation process for reads that fail validation because they are lower than previous estimates.</p> <p>In these situations, if the actual readings are confirmed to be accurate, they should be applied.</p> <p>Where revision 14 has already been issued, the permanent estimate process should be used to</p>	This is currently being investigated by our Service Provider and we are looking at a resolution by 30 September 2020.	Investigating

Description	Recommendation	Audited party comment	Remedial action
	ensure that all consumption is captured.		

NHH reads sent to EMS for reconciliation are also validated by EMS, and exceptions are sent to Simply Energy for investigation and resolution. Simply Energy also validates EMS' records against their own. These validation checks are discussed in **section 12.3**.

Consumption on inactive ICPs

When an ICP becomes disconnected the data stream is end dated in DataHub. If reads are received after the data stream has ended, they will become read import errors. These read import errors are reviewed to determine whether the consumption is genuine, and the ICP status and data stream dates are updated if necessary.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

I reviewed and observed the HHR, generation, and AMI data validation processes, including checking a sample of data validations and validation setting documentation.

Audit commentary

Electronic data used to determine volume information is provided by MEPs, AMS, EDM I and EMS as agents, and by Contact for CTCT generation information.

This function was examined as part of the MEP and agent audits and found to be compliant.

CTCT

HHR

A HHR load check occurs on switch in. This is discussed further in **section 8.3**.

On business day one of each month, data is received via the portal or TIBCO, and imported into HDM. Validation occurs when data is uploaded into the HDM system, and exception reports (dataset warnings) are generated. These exceptions are shared between the HDM team, who review and either approve the exception or estimate replacement data if necessary. In some cases, resolution involves contacting the customer or escalating issues to the sales team. The NEO graphing tool is used to chart HDM information to assist with analysis.

I walked through the validation process, including reviewing a sample of exceptions of each type for data provided by AMS and EDMI.

I walked through the process and confirmed that the following checks are performed:

- **File format and file content errors.** This includes instances where data is provided for unexpected channels or meters for the ICP, or the ICP has not been set up because Contact is awaiting paperwork.
- **Consumption averages are inconsistent with the previous three months.** These exceptions are investigated by reviewing historic consumption patterns using the NEO graphing tool and confirming the consumption with the customer. If there is a suspected meter accuracy issue, a field services job will be raised with the MEP.
- **Consecutive zeros.** If the consecutive zeros are consistent with the customer's previous consumption, they will pass validation. If consecutive zeros are unexpected, they will fail validation, and be checked with the customer to confirm whether they are valid.
- **Data spikes in KVARH or kWh inconsistent with the previous month,** including either two instances where variance is more than 50%; four instances where variance is more than 30%; or seven instances where variance is more than 20%. Spikes are graphed and reviewed against surrounding data and each other to determine whether they are reasonable or further investigation is required.
- **Insufficient data for validation.** This check identifies sites with less than three months of consumption history available for checking. These ICPs are reviewed manually to determine whether consumption appears reasonable.
- **All new connections, switch ins, upgrades, downgrades, meter reprograms, and meter changes** processed are independently checked by the HDM Team Leader or HDM Team Analyst. Sharepoint is used to track this approval and management process, and I saw evidence of the review process.

Overall, the level of validity checking is viewed as being of a high industry standard.

I viewed meter event information provided by AMS and EDMI, which is provided at the end of each month. AMS also separately email any events which they believe require action. Time synchronisation and meter events are scanned through and any items of concern are escalated to HDM team management.

AMS temporarily stopped sending monthly meter events from January to May 2020 due to a user process error, and reporting was reinstated in June 2020. During this time AMS continued to email individual events requiring action as they occurred.

AMI

AMI data is validated using the NHH validation process described in **section 9.5**. Additional validation is also completed in IMDM:

- HHR ICPs with missing trading period data are put “on hold” in IMDM and the data is not transferred to SAP. The exceptions are suppressed for three business days to allow time for the MEPs to provide the data. The exceptions are worked through daily and estimation of the missing trading period data is completed in IMDM.
Without intervention, data remains “on hold” and will not be transferred to SAP until 55 days after the latest missing period, then the import will restart. Users can manually adjust the dates for individual ICPs so that the missing records are ignored by the process and data transfer to SAP can resume (e.g. where reads are missing during a disconnected period). 2,464 of the 2,832 ICPs which currently have some missing data have Metrix meters, and 203 have FCLM meters. Contact are working with the MEPs to confirm which meters truly have HHR AMI data available and will stop attempting to obtain AMI data where the meters are not communicating.
- Checksum validation identifies ICPs where the sum of the volumes for the trading periods between midnight readings does not match the difference between midnight readings. These exceptions are individually reviewed and corrected by processing an adjustment in IMDM so that the data is consistent.
- Clocked meters are identified, and the readings are corrected by calculating the correct readings and importing the file into SAP. Clocked meters cannot be corrected in IMDM.
- ICPs with data provided before the expected start date are identified. This typically occurs where Arc provides a reading for the day before the switch in date. Each ICP is checked and the metering start dates are adjusted as necessary.
- Meter changes are identified through the validation process. The service orders are retrieved from ORB and Contact attempts to obtain readings and part day volumes where available. The corrections are entered directly into SAP.

MEPs provide information on clock synchronisation and meter events. Contact manually reviews the information as it is received, and takes action as required.

Contact had begun development of a process to review the full meter and meter event information they receive from MEPs using their COLA database. Queries were developed to identify issues for investigation including max kVa, sum-check and phase failure errors. This project was paused due to staffing changes, and eventually Contact hopes to automate these processes and combine them with the existing HHR validation processes.

AMI readings are also validated using the NHH validation process described in **section 9.5**.

Generation

Each morning, MV90 is checked to ensure that meter data has been collected. Any missing data or issues are highlighted in the front end in blue text. MV90 retries the meters each hour until data is retrieved. If data cannot be retrieved by the system, a user will investigate and then reattempt to retrieve the data.

The installed data loggers have a data storage capacity of at least 30 days, and data is received hourly by the Oracle database and updated in SAP three times daily at 4am, 9.30am and 12.30pm. I saw evidence of these updates during the audit.

MV90 stores all meter event log information, and the logs are checked daily. I sighted event logs during the audit and walked through the process to review them.

Each metering installation contains primary metering and back-up metering, plus SCADA data. The SCADA system generally uses a separate set of CTs and its own VT. Previously, Contact conducted a

comparison between the primary data in MV90 and the SCADA data in Oracle. If there were any exceptions in data from the primary meter, the check meter and SCADA were compared to identify where the issue lies. Now the reconciliation team checks the data for reasonableness prior to submission but is it difficult for them to know whether the submission data is accurate.

Contact does complete a comparison between its AV130 submission and the data in Oracle and investigates any exceptions.

Recommendation	Description	Audited party comment	Remedial action
Generation data validation	CTCT I recommend strengthening generation data checks, to ensure that generation data is accurate.	Contact has strengthened our validation and verification checks around generation data to ensure this issue does not reoccur	Identified

CTCS and CTCX

HHR

Up to 31/05/20 EMS completed validation of HHR data for CTCX and CTCS as an agent, and compliance is recorded in EMS' agent audit report.

- For CTCX, EMS collected and validated HHR data, and created HHR submissions.
- For CTCS, EMS collected and validated HHR data and created any permanent estimates and corrections required; and supplied the validated HHR data including estimates and corrections to Simply Energy in EIEP3 format. Simply Energy loaded these validated volumes into Datahub to produce reconciliation submissions. Further validation was conducted by Simply Energy to check for unexpected zeros and compare billed and submission volumes.

From 01/06/20, EDMI and AMS began supplying HHR data directly to Simply Energy, and Simply Energy has validated the data and created HHR submissions for CTCX.

The HHR validation process includes:

- review of consumption patterns against expected values at aggregate level using Power Query; this should be checked at ICP level,
- filtering of ICP, flow direction and trading period consumption to identify unexpected zero values; any unexpected zeros are checked by reviewing the ICP's consumption history or checking historic consumption with Contact Energy,
- review of meter events provided by AMS and EDMI,
- reporting on ICPs with missing trading period data which is followed up with the agents e.g. Simply Energy considers changing the submission type to NHH for HHR ICPs with metering category 1 or 2 and persistent missing data issues, and
- the ANH data stream is used to complete a sum check; in some cases, the sum check may fail because a switch read has failed validation (e.g. because it is higher than a subsequent AMI read) and this can take time to resolve.

The manual nature of the validation processes, workloads, and other priorities have resulted HHR validation not consistently being fully completed prior to all submissions. Non-compliance is recorded in **section 12.7** in relation to issues which were not detected and resolved through the HHR validation process prior to submission.

Recommendation	Description	Audited party comment	Remedial action
HHR validation of consumption patterns	CTCS/CTCX Validation of HHR consumption patterns should be completed at ICP level as well as aggregate level.	A change on process will allow this to occur on BD3 of September.	Identified
HHR data validation timeliness	CTCS/ CTCX Complete full HHR validation prior to each submission.	A change in process and other raised enhancements will allow this to occur by 31 October 2020.	Identified

AMI

For HHR AMI ICPs Simply Energy carries out the same billing validation as used for NHH ICPs. This includes high and low consumption to achieve compliance with 17(4)(d). Reporting is in place for missing data. Files with incorrect dates or times will be identified at the time of loading and two identical files cannot be loaded.

Meter event log information is received via SFTP, then moved to a folder on Simply Energy's network and manually reviewed.

Simply Energy is investigating automation of the review processes and is refining their review procedures. Events that could affect meter accuracy occur rarely, and if found are followed up with the MEP. There were no examples of meter events requiring action during the audit period.

Audit outcome

Compliant

10. PROVISION OF METERING INFORMATION TO THE GRID OWNER 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

This process is managed by EMS for CTCT and was assessed as part of their agent audit.

Audit commentary

Generation data is sent to EMS directly from SAP, according to a system schedule. EMS monitors to ensure that the data is received on time, and Contact staff also complete monitoring to ensure that all data is released prior to leaving for the day. Review of the EMS audit report confirmed that this process is managed in a compliant manner.

Audit outcome

Compliant

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 relevant grid owner half-hour metering information for:

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

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

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

Audit observation

This process is managed by EMS for CTCT and was assessed as part of their agent audit.

Audit commentary

This process is managed by EMS on behalf of Contact. Review of the EMS audit report confirmed that this process is managed in a compliant manner.

Audit outcome

Compliant

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

This process is managed by EMS for CTCT and was assessed as part of their agent audit.

Audit commentary

This process is managed by EMS on behalf of Contact. Review of the EMS audit report confirmed that this process is managed in a compliant manner.

In most instances, EMS collects the data as an agent for generators. Interrogation begins at midnight and is complete before 0500 on each day. Some data is provided by Contact to EMS and this data was provided by 0430 for a selection of days checked. If actual data is not available, an estimate is automatically generated and sent to EMS, and the users will check for actual data and send an update later that morning.

Any loss adjustment relative to the grid injection point is normally made within the metering installation at the time of installation and commissioning.

Audit outcome

Compliant

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 a grid owner under clauses 13.136 to 13.138, or 13.138A, it must also, by 0500 hours of that day, advise the relevant grid owner.

Audit observation

This process is managed by EMS for CTCT and was assessed as part of their agent audit.

Audit commentary

EMS is the agent to the grid owner and conducts this notification. Compliance is confirmed in the EMS audit report.

Contact receives an email when data sent to EMS has failed or needs to be estimated, and these are acted upon by Contact.

Audit outcome

Compliant

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 examples of notifications provided and whether any breach allegations had been made.

Audit commentary

CTCT

If a new combination of network and NSP requires set up in SAP, the reconciliation team is notified by the network, Contact's switching team, or Contact's new connections team, and a trading notification is created as part of the set-up process.

Checks that valid trading notifications are in place are part of the reconciliation report validation checks, discussed in **section 12.3**. I observed this process and noted that it matched the submission data with open trading notifications. All mismatches are reviewed by the reconciliation team, and notifications are provided via the reconciliation portal as needed. The reconciliation portal will not accept any submission where a valid trader notification is not in place, and notifications are created as required if a file fails validation.

No breach allegations were made in relation to trading notifications.

CTCX and CTCS

Simply Energy does not routinely create trading notifications.

Trading notifications are checked and updated when tranches of ICPs switch in for CTCS, or a new non-standard profile (such as DST) will be applied. The reconciliation portal will not accept any submission where a valid trader notification is not in place, and notifications are created as required if a file fails validation.

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

I reviewed the GR100 ICP days comparison reports for the audit period and investigated a sample of variances.

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

Audit commentary

CTCT

The process for the calculation of ICP days was examined by checking 15 NSPs with a small number of HHR ICPs, and 21 NSPs with a small number of NHH ICP for February 2020 revision 1. A difference of 13 days was found for PBS0011, because a system trigger failed to refresh a settlement unit in SAP. I confirmed that the issue has been resolved and the ICP will be correctly reported in revision submissions.

The following table shows the ICP days difference between Contact files and the RM return file (GR100) for all available revisions for 16 months. Negative percentage figures indicate that the Contact ICP days figures are higher than those contained on the registry. The discrepancies are small and have generally decreased with later revisions.

Month	Initial	R1	R3	R4	R5	R7	R8	R14	R15
Nov 2018	-0.46%	-0.46%	-0.45%	-	-	-0.40%	-	-0.39%	-
Dec 2018	-0.46%	-0.47%	-0.47%	-	-	0.00%	0.00%	-0.39%	-
Jan 2019	-0.51%	-0.51%	-0.51%	-	-	0.00%	-	0.00%	0.00%
Feb 2019	-0.56%	-0.56%	-0.53%	-	-	-0.42%	-	-	-
Mar 2019	-0.65%	-0.65%	-0.59%	-	-	-0.44%	-	-	-

Month	Initial	R1	R3	R4	R5	R7	R8	R14	R15
Apr 2019	-0.67%	-0.56%	-0.57%	-	-	-0.01%	-	-	-
May 2019	-0.66%	-0.67%	-0.46%	-	-0.46%	-0.44%	-	-	-
Jun 2019	-0.66%	-0.65%	-0.50%	-0.50%	-	-0.47%	-	-	-
Jul 2019	-0.56%	-0.57%	-0.52%	-	-	-0.49%	-	-	-
Aug 2019	-0.59%	-0.56%	-0.54%	-	-	-0.53%	-	-	-
Sep 2019	-0.59%	-0.58%	-0.57%	-0.57%	-	-	-	-	-
Oct 2019	-0.60%	-0.61%	-0.57%	-	-	-	-	-	-
Nov 2019	-0.45%	-0.45%	-0.58%	-	-	-	-	-	-
Dec 2019	-0.60%	-0.05%	-0.56%	-	-	-	-	-	-
Jan 2020	-0.61%	-0.06%	-	-	-	-	-	-	-
Feb 2020	-0.50%	-0.62%	-	-	-	-	-	-	-

I checked a sample of ten differences remaining at revision seven or later, for periods after January 2019. I found that the differences remained for two key reasons:

1. Incorrect or duplicate settlement units

SAP contains settlement units, which specify the submission parameters (e.g. active HHR, inactive NHH) for each time slice. These settlement units determine which reports the ICP appears on, and whether they are included or excluded.

Contact has found some intermittent issues with the creation of settlement units. It appears that under certain circumstances creation of settlement units is not triggered as expected. System fixes have been implemented to resolve the issue. The number of ICPs affected has decreased significantly, but some triggers are still being missed. It is believed that this may be because of clashes between the triggers and other scheduled overnight processes. Contact has changed the order that the overnight processes are run in and is completing analysis to determine why some triggers are still being missed. Submission is correct once the settlement units have been updated.

ICP days are also technically overstated for disconnected ICPs. ICPs are typically disconnected part way through a day, with some consumption occurring up to the time of disconnection. The code requires status changes to be processed as at the beginning of the day, but to ensure that all consumption is reported Contact treats the disconnection date as active. The impact is minimal, and the process ensures that all consumption is captured.

2. Defect 5378 system fix

Contact settles DUML as HHR. Submissions are calculated in SAP using the same multiplier logic as is applied for NHH meters. When a daily unmetered kWh update occurs, SAP finds the multiplier attribute and sends an update to the registry to add a NHH profile. The fix for defect 5378 was intended to uncouple the updates, to prevent unnecessary changes to HHR for DUML ICPs. Unfortunately, the change affected ICPs changing from unmetered BTS to permanent causing them to have submission type NHH and HHR, and profile RPS and HHR. The affected ICPs have been corrected and the SAP analyst is investigating a system fix.

I followed up the causes of incorrect ICP days submissions identified in the previous audit, which I did not see evidence of during this audit.

1. Incorrect submission type

AMI meters settled as NHH may have additional registers not used for settlement which contain HHR data. In some cases, SAP identifies these HHR registers, and sends the registry an update to HHR submission type in error.

Registry trader updates occur for a range of reasons, and include ANZSIC codes, unmetered load information, and submission information. In some cases, manually processed updates may be processed with the current values for fields that are not changing, with a different event date. This can cause errors in the submission type for revision submissions.

Contact compares a date ranged registry list report to their ICP level detail submissions to identify and correct these incorrect submission types. I did not see any evidence of this issue during the audit.

2. No zeroing process for AV110 submissions

The reconciliation manager's database replaces records when revision information is received. Where no revision information is provided for month, network, and NSP combination the previous submission data is retained. To remove submission information a zero line is required to be submitted. Contact Energy has a zeroing process in place for AV110 submissions, which is operating as intended.

CTCX

The process for the calculation of ICP days was examined by checking NHH ICP days for all NSPs for Sep 19 r1, Jan 20 r1 and Mar 20 r1, and all HHR ICPs for Jun 2020 r0. No issues were identified.

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

Month	Initial	R1	R3	R7	R14
Nov-19	-	28.57%	28.57%	-	-
Jan-20	-	28.57%	-	-	-
Apr-20	4.36%	4.48%	-	-	-
May-20	6.26%	3.08%	-	-	-

Month	Initial	R1	R3	R7	R14
Jun-20	3.03%	-	-	-	-

I checked a sample of 15 differences and found that they related to SB ICPs, which are excluded from the retailer ICP days and included in the registry ICP days.

EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. No other CTCX or CTCS ICPs were affected by this issue, and EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.

CTCS

The process for the calculation of ICP days was examined by checking NHH ICP days for all NSPs for March 2020 and HHR ICP days for a sample of 55 NSPs with a small number of ICPs for June 2020. I found three exceptions:

- HHR ICP days were under submitted for WRK0331, because a HHR ICP was excluded from the submission because a temporary estimate was not created for missing HHR interval data. The issue was resolved by revision three.
- HHR ICP days were under submitted for NSP BRB0331 (0000566480NR352). A meter change on 23/06/20 was not processed prior to the initial submission due to workload, and the temporary estimates process was not run. This resulted in no interval data being produced after 23/06/20 and no ICP days being reported, leading to under submission of seven ICP days. An estimate was entered into the HHR volumes.
- NHH ICP days were under submitted for PRM0331 because five ICPs had more than one profile assigned (RPS E08) and the Datahub MADRAS Dashboard validations had not been updated to identify the dual profile combination. This resulted in the ICPs being excluded from submission information. The issue was resolved by revision three.

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

Month	Initial	R1	R3	R7	R14
Mar-20	-	2.62%	0.00%	-	-
Apr-20	0.00%	0.00%	-	-	-
May-20	23.28%	23.99%	-	-	-
Jun-20	32.56%	-	-	-	-

I checked the differences and found:

- The large ICP days difference for June was largely caused by one file of new ICPs which failed to be uploaded in MADRAS because one mandatory field (GXP) was blank for one row. The failure was not identified until after the initial submission. Simply Energy validates the files before they

- ICP days were not calculated for HHR ICPs with missing days of data, because temporary estimates were not created until after the June 2020 initial submission.
- Some differences were timing issues around ICPs switching in, and these are expected to wash out for later revisions.
- ICPs with RPS E08 profiles were not being validated and sent to MADRAS. The issue was resolved by revision three.
- One ICP was excluded from the ICP days because the start date was incorrectly recorded in SalesForce and sent to Madras. The error was resolved by revision three.

Audit outcome

Non-compliance	Description
<p>Audit Ref: 11.2</p> <p>With: Clause 15.6</p> <p>From: Nov-18</p> <p>To: Jun-20</p>	<p>CTCT</p> <p>ICP days were not reported correctly where settlement unit information was incorrect in SAP, or a system defect resulted in an incorrect submission type being applied. Contact has been working to resolve these issues before revision 14, and the ICP days differences are generally small.</p> <p>CTCX</p> <p>EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.</p> <p>CTCS</p> <p>HHR ICP days were not reported correctly where temporary estimates were not inserted for ICPs with missing days of data up to June 2020 revision 1.</p> <p>NHH ICP days were not reported correctly because some ICPs were not set up in MADRAS, data issues prevented ICPs being sent to MADRAS, and/or incorrect start dates were applied. The issues were resolved through the revision process.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
Low	<p>The controls are rated as moderate overall.</p> <ul style="list-style-type: none"> For CTCT workarounds are in place to identify and correct ICPs with missing or incorrect settlement units and submission types, but I found some of these issues had not been resolved by revision 7.

	<ul style="list-style-type: none">• The CTCX missing ICP was caused by an administrative error when it was end dated.• For CTCS processes are in place, but their manual nature, workloads and other priorities resulted in them not being completed and errors not being detected prior to submission. <p>The impact is assessed to be low because corrected data will be washed up.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p>CTCT HHR</p> <p><u>Some ICPs were missing from submissions.</u></p> <p>We have established a more robust reconciliation process utilising the GR090 ICP Missing file to identify underlying set up issue within our settlement system and also interval data delivery issues.</p> <p>We have undertaken a reconciliation of historical GR090 reports and existing identified all ICP exceptions and we will resolve these issues in time for the next scheduled wash up.</p> <p>We are also automating this reconciliation to enable more timely monitoring of any issues impacting our HHR submissions.</p> <p>CTCX</p> <p>EMS has admitted to the error and data will be included in future revisions.</p> <p>CTCS</p> <p>Moving the temporary estimate process to BD3 has allowed more time to resolve any issues and we don't expect any further non-compliance in this area.</p>	Resolved	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p><u>CTCT - HHR</u></p> <p>Create monthly reporting of number of exceptions on future GR090 reports to track progress of identification and resolving ICP Missing issues in HHR AGG or Registry.</p> <p>CTCS</p> <p>Process timings have been updated.</p>	Dec 2020	

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 a sample of NSPs with a small number of ICPs to confirm the AV120 calculation was correct.

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

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

Audit commentary

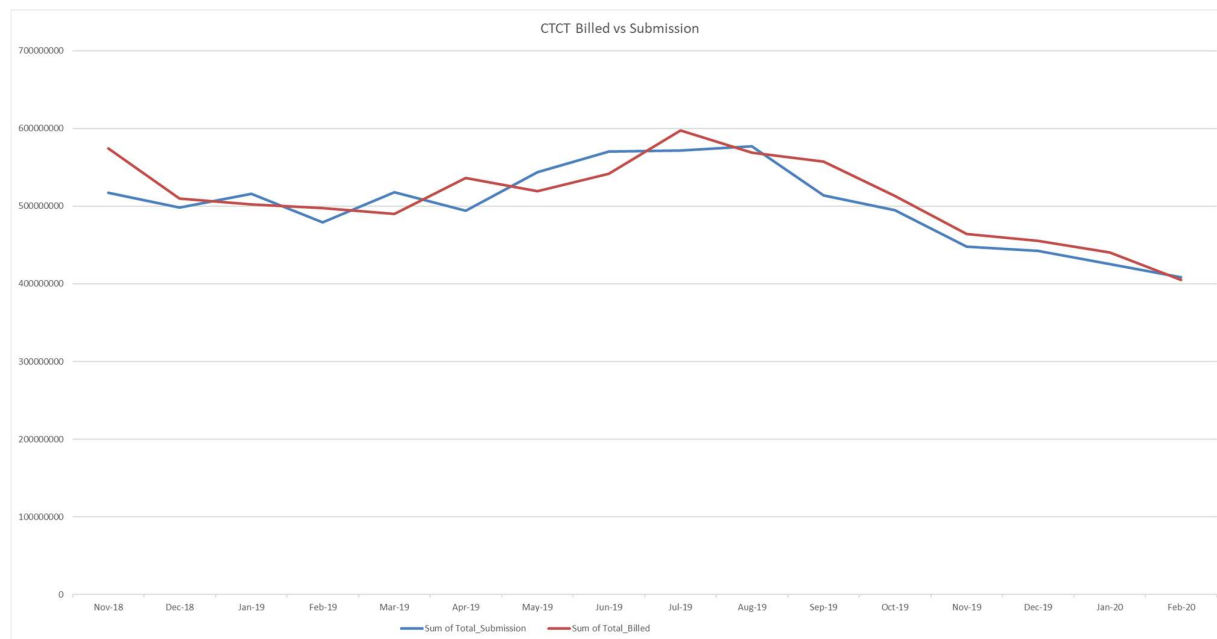
CTCT

The accuracy of the NHH and HHR electricity supplied information was checked by examining five NSPs with a small volume and against the invoices. Compliance is confirmed.

The chart below shows a comparison between submissions and electricity supplied information. At an aggregate level, submitted data is 1.1% lower than billed data for the two years ended February 2020 and 1.3% lower than billed data for the year ended February 2020.

Contact monitors billed data against submission data on a rolling 12-month basis. A one-month offset is applied so that the billing and reconciliation periods are aligned. Mass market data is checked at balancing area level and HHR data is checked at ICP level. AV120 data is also compared to previous AV120 submissions when the reports are created.

Comparison between submitted and billed kWh



One breach was recorded relating to the AV120 submission for April 2020, because a line was included for a GD NSP. This line is normally omitted prior to submission but was missed, largely due to staff being under pressure due to the COVID-19 lockdown. The RM removed the unnecessary record and there was no impact.

Reference	Date	Clause	Summary	Status	Result
2005CTCT1	27/05/20	Part 15 clause 15.2A	CTCT submitted volume for a GD NSP (BDE0111-SOLE) in their AV-120 202004 initial submissions on BD4.	Fact finding	No result yet

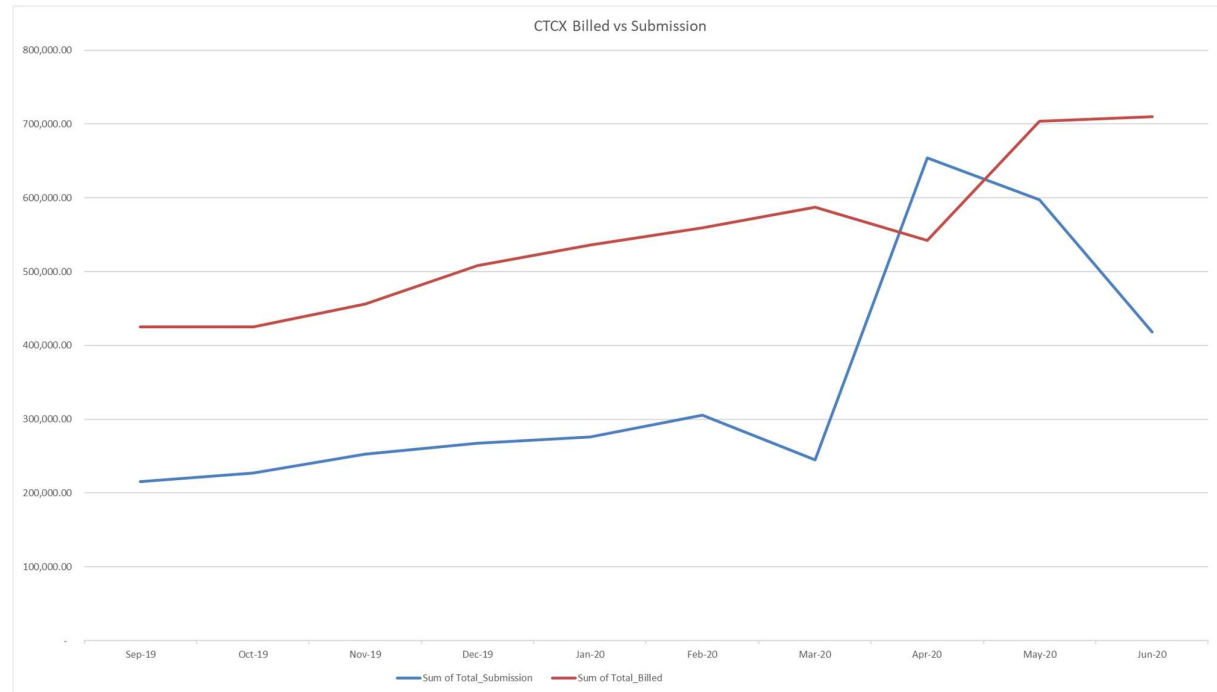
CTCX

Simply Energy monitors differences between billed and submitted data using its Power Query tool and investigates anomalies.

The accuracy of the NHH and HHR electricity supplied information was unable to be checked because I was unable to reconcile the AV120 report volumes to the physical invoices.

The chart below shows there is a significant difference between billed and submitted data. For September 2019 to February 2020 I confirmed that the differences between billed and submitted data were reasonably consistent with the volumes allocated to the SB ICPs, which are included in the billed data but excluded from the submission data. From March 2020 onwards, the relationship between billed and submitted data does not appear reasonable, and it appears there is an issue with the billed and/or submission data which requires investigation and correction. Simply Energy is investigating the cause of the difference.

Comparison between submitted and billed kWh



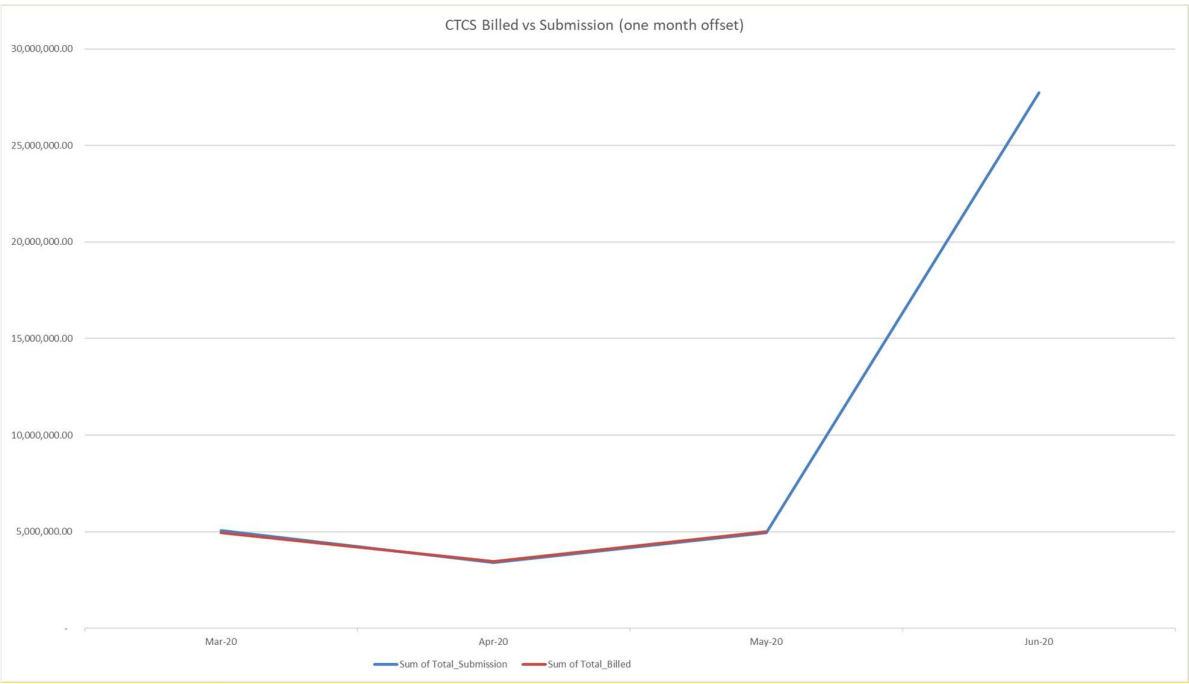
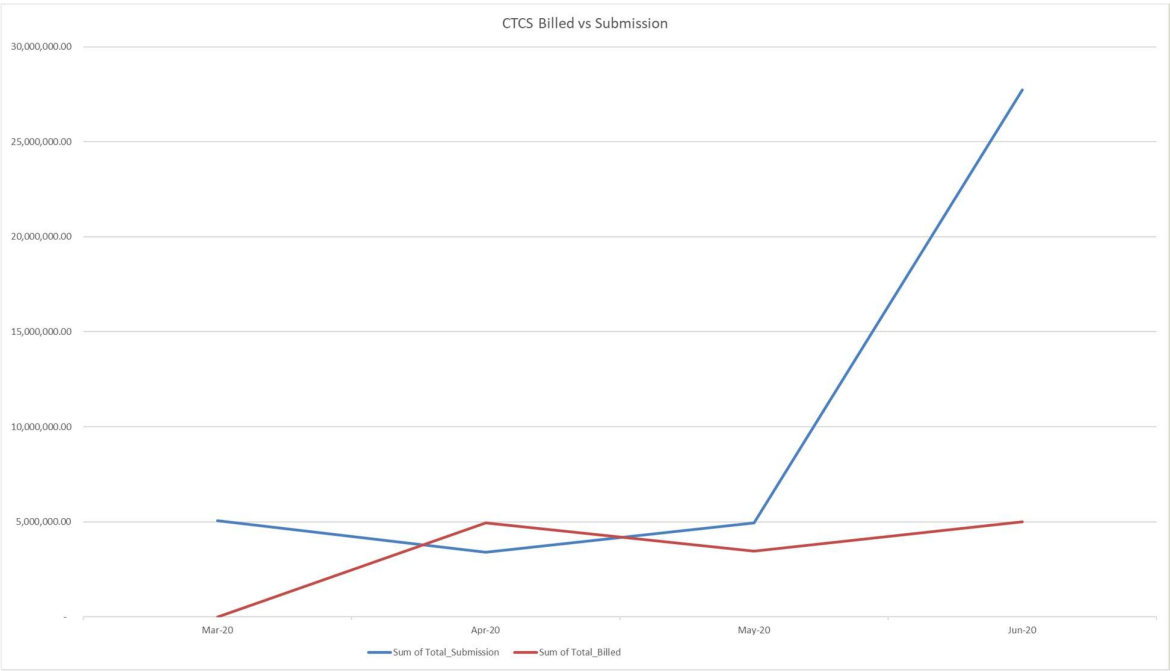
CTCS

Simply Energy monitors differences between billed and submitted data using its Power Query tool and investigates anomalies.

The accuracy of the NHH and HHR electricity supplied information was unable to be checked because I was unable to reconcile the AV120 report volumes to the physical invoices.

The chart below shows a comparison between submissions and electricity supplied information to date. Once the billing period and submission period are aligned there is a very small difference between the billed and submitted values.

Comparison between submitted and billed kWh



Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.3 With: Clause 15.7 From: 01-Mar-20 To: 30-Jun-20	CTCT Alleged breach 2005CTCT1 recorded that CTCT submitted volume for a GD NSP (BDE0111-SOLE) in their AV-120 202004 initial submissions on BD4. CTCX The Mar-20 to Jun-20 billed volumes are inconsistent with the Mar-20 to Jun-20 submission volumes. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate overall.</p> <ul style="list-style-type: none">For CTCT controls are strong, and sufficient to ensure submission is accurate almost all the time.For CTCX controls are rated as moderate, as the reasons for the difference could not be determined. The files are generated from AXOS, and there are monitoring controls in place. <p>The impact is low, because the AV120 submission is used to check the reasonableness of NHH and HHR volumes submissions and has no impact on reconciliation results. The incorrect line was removed by the RM for CTCT.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
CTCT Contact acknowledges that we included a record in our AV-120 file for a GD connection when the RM functional spec requires that GD reconciliation types are to be excluded. Our SAP system automatically includes electricity supplied records for all electricity bills and we have a manual process to remove this record from our file prior to submission. A defect ticket has been raised to allow SAP to filter out GD records for this submission file. We are awaiting prioritisation of this fix. It is important to note that this AV-120 file was run through the RM file checker process and this did not detect this issue – it is unfortunate that the file checker rules were not designed to align with the functional specification requirements. Additionally, as this erroneous line related to a GD NSP there is no impact as GD NSPs are not part of be billed vs submitted comparison performed by the RM. CTCX The differences have been investigated and the two issues found are in the process of being corrected. By Revision 7 these discrepancies will be resolved.		TBC	Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
CTCT A defect ticket has been raised to allow SAP to filter out GD records for this submission file. We are awaiting prioritisation of this fix. CTCS/CTCX Improved validation reporting to ICP has been implemented.	TBC	

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

Code reference

Clause 15.8

Code related audit information

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

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

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

Audit observation

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

The GR090 ICP Missing files were examined. An extreme case sample of ICPs missing were checked.

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

Audit commentary

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

CTCT

I confirmed that the process for the calculation and aggregation of HHR data is correct, by matching HHR aggregates information with the HHR volumes data for 17 submissions. There were only small rounding differences between the volumes and aggregates, with differences less than ± 171 kWh across each submission. I checked the differences at NSP level for one submission and confirmed that they related to rounding; the aggregates file is rounded to zero decimal places at ICP level and the volumes are rounded to two decimal places at trading period level.

As AMI ICPs move from NHH to HHR settlement, there is an increased volume of ICP missing differences due to timing, which makes it difficult to monitor the ICP missing report. Instead, Contact checks the expected ICP days based on the registry list to their ICP level submission information at month end and on the first business days of the month. The review identifies ICPs with submission type and ICP days discrepancies, and focusses on HHR ICP days differences, and any unmetered load with RPS HHR profiles

applied. When reviewing the report, the team sometimes made incorrect assumptions about what was causing the ICP days differences which led to some settlement unit errors not being corrected and issues remaining for later revisions. Due to workloads there were also sometimes delays in processing corrections required to resolve ICP missing issues.

For C&I HHR ICPs an HDM ICP days analysis is also completed which compares the ICP days reported to previous months and revisions, and any discrepancies are investigated.

GR090 ICP Missing files were examined for all revisions for November 2018 to February 2020. An extreme case sample of the ten ICPs missing for the most months were reviewed. I found that the differences related to HHR AMI meters.

- In most cases the ICPs were missing because a profile had not been created for a new/replacement AMI meter, to store the interval data. The profiles are created using workflows, and where the workflow cannot create the profile a BPEM is generated and the profile is created manually by the IDM team. There are sometimes delays in resolving issues due to workloads; BPEMs are generated for all AMI meters where AMI data is received and there is no profile to load it against not only HHR settled ICPs. A system defect has been raised to determine why no default consumption value or ICP days were added. In most cases, the issues were identified through the ICP days reconciliation but were not correctly resolved in time for submission.
- Some settlement units did not reflect the correct ICP status.
- Inactive ICPs continued to be reported in the aggregates.
- Some backdated trader updates to change submission types caused ICPs to be missing from the registry or aggregates.

During the 2019 audit I found ICP 0278411762LC033 was missing from the HHR aggregates submission in April and May 2019 due to a data set up error. I confirmed the issue is cleared and the ICP was correctly included in later revisions.

CTCX

I confirmed that the process for the calculation and aggregation of HHR data is correct, by matching HHR aggregates information with the HHR volumes data for five submissions. The totals matched to zero decimal places.

ICP missing files are reviewed by Simply Energy, and data corrections are completed as necessary. I reviewed the ICP missing reports for November 2019, January 2020, May 2020, and June 2020. There was one ICP missing from the May 2020 initial submission because of a Datahub profile discrepancy, which was corrected prior to revision 1.

I also checked differences between revisions and found there was a difference of 33,664.52 at RFB0011 between the November 2019 revision 3 and revision 7. The difference occurred because EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. No other CTCX or CTCS ICPs were affected by this issue, and EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.

CTCS

I confirmed that the process for the calculation and aggregation of HHR data is correct, by matching HHR aggregates information with the HHR volumes data for March 2020 revision 1. The totals matched to two decimal places.

There was a difference of 35,912 kWh between the volumes and aggregates submissions for CTCS for the June 2020 initial submission. There was missing data for seven days at BRB0331 and two days at BRK0331 which caused the HHR aggregates submission to fail the file checker validation. Due to time

constraints, Simply Energy took the nearest day's data for the aggregation row and applied it for the missing days. The aggregates file and ICP days file were not modified due to a lack of time. The estimated data was replaced with actuals by revision 1, and the HHR volumes and aggregates files were consistent. A recommendation is raised in **section 9.4**.

ICP missing files are reviewed by Simply Energy, and data corrections are completed as necessary. GR090 ICP Missing files were examined for March 2020, May 2020 and June 2020.

- One ICP was missing from the March 2020 revision 1 because a temporary estimate was not created for missing HHR interval data. The issue was resolved by revision three.
- 995 ICPs were missing from the May 2020 initial and 973 ICPs were missing from the May 2020 revision 1. The transfer switch ICPs were requested for 01/06/20, but CTCT sent the CS files effective from 31/05/20. There was insufficient time for Simply Energy to set up all the meters prior to revision 1 and it is expected all meters will be set up and submission will be complete for revision 3.
- 13 ICPs were missing from the June 2020 initial submission. Four were missing because temporary estimates were not created prior to submission, eight were missing because the ICPs did not have HHR profiles created in Datahub prior to submission, and one had a profile code discrepancy.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 11.4</p> <p>With: Clause 15.8</p> <p>From: Jul-19</p> <p>To: Jul-20</p>	<p>CTCT</p> <p>HHR aggregates file does not contain electricity supplied information.</p> <p>Some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data. Revised data will be provided through the revision process.</p> <p>CTCX</p> <p>HHR aggregates file does not contain electricity supplied information.</p> <p>EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.</p> <p>One ICP was missing from the May 2020 initial submission because of a Datahub profile discrepancy, which was corrected prior to revision 1.</p> <p>CTCS</p> <p>HHR aggregates file does not contain electricity supplied information.</p> <p>HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing. Revised data will be provided through the revision process.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p>

	Controls: Moderate Breach risk rating: 4	
Audit risk rating	Rationale for audit risk rating	
Medium	<p>The issue relating to content of the aggregates file is an error in the code, Contact is providing submission information as expected.</p> <p>The controls are rated as moderate overall:</p> <ul style="list-style-type: none"> For CTCT system changes have been made, and further changes are underway to address the settlement unit issues. Issues that had not been addressed by the system fix were being detected, but correction was not occurring as intended due to a training/process issue which has now been resolved. For CTCX the missing revision data appears to be caused by an isolated administrative error. For CTCS processes are in place, but their manual nature, workloads and other priorities resulted in them not being completed and errors not being detected prior to submission. <p>The impact is medium based on the volume differences identified, and corrected data will be provided through the revision process.</p>	
Actions taken to resolve the issue		Remedial action status
CTCT <u>HHR aggregates file does not contain electricity supplied information</u> We believe that due to conflicts between the Code and the RM functional specification we are not able to comply with both sets of requirements. <u>Some ICPs were missing from submissions.</u> We have established a more robust reconciliation process utilising the GR090 ICP Missing file to identify underlying set up issue within our settlement system and also interval data delivery issues. We have undertaken a reconciliation of historical GR090 reports and existing identified all ICP exceptions and we will resolve these issues in time for the next scheduled wash up. We are also automating this reconciliation to enable more timely monitoring of any issues impacting our HHR submissions. CTCS The mass switch over as reported previously and the ICPs switching in on 31 May 2020 contributed to this issue.		Identified Ongoing Implemented

Preventative actions taken to ensure no further issues will occur	Completion date	
<p>CTCT</p> <p><u>HHR aggregates file does not contain electricity supplied information</u></p> <p>We were under the impression that the Authority was going to investigate and resolve the conflict as part of the 2019 Code Review omnibus.</p> <p><u>Some ICPs were missing from submissions</u></p> <p>We are automating this reconciliation to enable more timely monitoring of any issues impacting our HHR submissions.</p> <p>CTCS</p> <p>Running temporary estimates on BD3 now will assist in resolving these issues.</p>	<p>Ongoing</p> <p>31 Dec 2020</p>	

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

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

Audit observation

Daylight savings processes for MEPs and agents were reviewed as part of their audits.

Daylight savings processes for generation occur automatically. The Windows Server or Domain Controller Upgrade & Replacement Time Synchronisation and time source testing document was reviewed.

Audit commentary

CTCT

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

All HHR data provided to Contact is daylight savings adjusted using the "trading period run on" technique. This was confirmed by checking a sample of four files for the files for the start and end of daylight saving. The correct number of trading periods were recorded in all cases.

Contact Energy's processes for generation data are compliant. I confirmed that daylight savings adjustments were processed correctly for a sample of data for September 2019 and April 2020.

CTCX

Submission data is created by EMS, using volume data provided by AMS up to 31/05/20. Compliance is recorded in both agent reports.

From 01/06/20 AMS and EDM I provide daylight savings adjusted data and the daylight-saving adjustment process is compliant.

CTCS

AMS and EDM I provide daylight savings adjusted data and the daylight-saving adjustment process is 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

Processes to ensure that HHR, NHH and generation submissions are accurate were reviewed. A list of breaches was obtained from the Electricity Authority.

Audit commentary

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

CTCT

HHR

HHR submissions were checked in **section 11.4** and HHR corrections are discussed in **section 8.2**. HHR volumes are reviewed prior to submission according to the process documented in **section 12.3**.

As discussed in **section 11.4**, some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data. Revised data will be provided through the revision process.

NHH

Contact prepares reconciliation submissions using reconciliation consumption generated by SAP. NHH submission scenarios were checked to determine whether they were handled correctly, including:

- five ICPs with vacant consumption,
- 45 ICPs with inactive consumption,
- five ICPs with injection/export registers, and
- ten ICPs with unmetered volumes, including five ICPs with standard and five ICPs with shared unmetered.

Correct volumes were submitted for all the ICPs checked, except the unmetered volumes for 0000036759CP7C2 and 0006168329RN457 for May 2020 which were corrected during the audit. ICP 0000036759CP7C2 had initially reported zero unmetered load due to a settlement unit assignment error and 0006168329RN457 had an incorrect effective date applied. Compliance is recorded in this section because the submission process was compliant, and the errors occurred due to inaccurate data inputs. Non-compliance is recorded in **section 12.7**.

A sample of corrections were reviewed to ensure that they flowed through to revision submissions in **sections 2.1** and **8.1**. NHH volumes are reviewed prior to submission, these checks are discussed in **section 12.3**.

Generation

Generation submissions are completed by Contact, and these are discussed in **section 12.6**.

CTCX and CTCS

HHR

HHR submissions were checked in **section 11.4** and HHR corrections are discussed in **section 8.2**. HHR volumes are reviewed prior to submission according to the process documented in **section 12.3**.

CTCS HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing. Revised data will be provided through the revision process.

EMS prepares NHH submissions as an agent. NHH submission scenarios were reviewed.

- No corrections were required during the audit period, and I confirmed that revised submissions are provided. NHH volumes are reviewed prior to submission, these checks are discussed in **section 12.3**.

Audit outcome

Non-compliance	Description
<p>Audit Ref: 12.2</p> <p>With: Clause 15.4</p>	<p>CTCT</p> <p>Some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data.</p> <p>CTCX</p> <p>ICP 0158947339LC9D1 was missing from some HHR revision submissions.</p> <p>CTCS</p> <p>CTCS HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing.</p> <p>Some ICPs were not created in MADRAS in time for inclusion in the June 2020 initial submission.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>
<p>From: Sep-19</p> <p>To: Jul-20</p>	

Audit risk rating	Rationale for audit risk rating		
Medium	<p>The controls are rated as moderate overall:</p> <ul style="list-style-type: none"> For CTCT system changes have been made, and further changes are underway to address remaining issues. For CTCX the missing HHR revision data appears to be caused by an isolated administrative error, and the incorrect end date was a manual data processing error. For CTCS processes are in place, but their manual nature, workloads and other priorities resulted in them not being completed and errors not being detected prior to submission. <p>The impact is medium based on the volume differences identified, and corrected data will be provided through the revision process.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
CTCX EMS mistakenly removed this ICP from their washup submissions, this issue has now been resolved and the ICP will be included in future washups. CTCS The mass switch over as reported previously and the ICPs switching in on 31 May 2020 contributed to this issue.			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
CTCS/CTCX Running temporary estimates on BD3 now will assist in resolving these issues.			

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**.

Processes to ensure that HHR, NHH, and generation submissions are accurate were reviewed. A sample of GR170 and AV080 files were compared, to confirm zeroing occurs.

Audit commentary

CTCT

NHH submissions

The process for aggregating the AV080 was examined by checking seven NSPs with a small number of ICPs. Compliance is confirmed.

Contact runs the submission through an Access database for review prior to submission. In some cases, consumption errors are found during the high consumption and forward estimate checks that cannot be corrected in time for submission. Contact manually estimates the consumption and creates an exclusion list. The submission file is generated from the reviewed Access database information and adjusted for the exclusions, then the before and after data is compared to ensure the corrections were processed accurately.

I walked through these pre-submission checks for May 2020.

- ICPs using over 10,000 kWh per month are checked against a list of known high consuming ICPs, and any high consuming ICPs not on the list are investigated. All ICPs consuming over 2,500 kWh per day are also individually investigated. The number of exceptions identified by this check has been decreasing over time, and 24 ICPs required checking for May 2020.
- A Forward Estimate Robot process reviews any ICPs with forward estimate over 10,000 kWh. The Robot checks whether the reads applied for forward estimate are aligned with the consumption history. If they are aligned, the case is closed. If they are not aligned, the forward estimate is zeroed out, and an exception is generated and logged. Any ICPs with forward estimate over 10,000 kWh which appear in the submission data are reviewed to determine whether the forward estimate is correct. Occasionally open meter read orders create a zero read for forward estimate, making it appear that the meter has rolled over.
- Distributed generation issues, including invalid flow direction, inconsistency between profile and direction, no contract set up, or contract set up and no data in the report are identified and corrected.
- Invalid profiles, such as HHR are identified and corrected.
- Invalid loss codes, which are either missing or inconsistent with the network are identified and corrected.
- NSPs with no contract set up are identified and trading notifications are issued.
- Historic estimate > total estimate is checked and corrected.
- Expected profiles which are missing from the submission data are checked and resolved.
- ICPs with potential consumption data defects, transposed reads, or read errors are investigated and their consumption is manually estimated to ensure the issues do not affect submission accuracy thresholds.
- Missing profile shape values are identified and added.

Once reviewed and any data issues have been resolved, a revised AV080 is produced from the database. This is entered into an Excel based AV080 check worksheet for further review. This NSP level check includes:

- initial submission – comparison to the previous month, which flags any variances greater than $\pm 500,000$ kWh and $\pm 5\%$, or
- revision submissions – comparison to the previous submissions for the month, which flags any variances $\pm 50,000$ kWh and $\pm 5\%$.

Anomalies are investigated at a more detailed level to confirm whether there is an issue that requires further investigation or correction. Once all checks are complete, the file is saved as csv, run through the file checker and submitted.

SAP automatically creates a zero line where a trading notification is open, but no aggregation line is present. GR170 and AV080 files for five revisions were compared. All NSPs in the GR170 were included in the AV080 confirming that zeroing is occurring as required for AV080 submissions.

I checked the process for NHH to HHR upgrades, and HHR to NHH downgrades, and found all consumption was captured and reported for the ten ICPs checked.

HHR Submissions

HHR submissions are generated using SAP data. HHR submission validation checks focus on C&I HHR data which is also contained within HDM. HHR AMI data is checked for reasonableness.

- Database checks are run prior to submission to identify NSPs where a contract is in place, but no volumes are submitted, and NSPs where no contract is in place, but volumes are present on the AV090. Corrections are made as necessary.
- SAP and HDM HHR aggregate data is compared prior to submission and anomalies are investigated, including ICPs missing from either data set, consumption differences, and ICPs with default estimates applied. Differences typically relate to DUML streetlight information, switch and switch withdrawal timing, and a generation site which is not billed in SAP.
- Differences between the AV090 and AV140 submissions are checked, and any differences which do not appear to relate to rounding are investigated.
- For initial AV090 submissions, consumption is graphed at NSP level and checked for reasonableness against the previous six months' submissions. Consumption per NSP and loss factor is checked to identify changes of more than 10% from the previous month, which is then examined, and comments are added to the file. Once this review is complete it is independently checked by the HDM Team Leader.
- For revision AV090 submissions, data is reviewed against the previous submission for the month in HDM and SAP. Any differences over approximately 15% are reviewed, and an informal materiality limit is applied to approve small kWh differences. Once this review is complete it is independently checked by the HDM Team Leader.

Generation

Generation submissions are reviewed as discussed in **section 9.6**.

CTCX and CTCS NHH submission

Checks to confirm that Simply Energy's data is complete and accurate are discussed in **section 2.1**.

Simply Energy to EMS consistency checks

Updated reads are sent to EMS at least weekly. Each month, Simply Energy asks EMS to clear the reads recorded and resupplies the "published" (validated) readings.

Data consistency checks between EMS' MADRAS records, and Simply Energy's Salesforce and registry list file records are completed prior to business day 4 and business day 13.

- NHH reads sent to EMS for reconciliation are validated by EMS, and exceptions are sent to Simply Energy for investigation and resolution. Reads rarely fail this validation.
- EMS provides a file with ICP and meter details including start and end dates every two to three months, which is reconciled to a date ranged registry list file. Any differences are investigated and resolved.
- The GR100 ICP comparison reports received from the reconciliation manager are reviewed, to determine the reasons for any differences and whether data needs to be updated on the registry or in Salesforce, DataHub and MADRAS. The review prioritises the latest revisions available.
- The MADRAS Dashboard in Salesforce is reviewed on business days two to four and business days 11-13 and identifies ICPs that require action or need to be checked, including:
 - all accepted RRs which are checked to ensure that EMS and DataHub have the correct reads recorded,
 - ICPs with an unexpected profile for the NSP or configuration,
 - ICPs that are end dated but still have CTCX recorded as the retailer,
 - ICPs where the start read is inconsistent with the start date,
 - ICPs supplied by an alternate reader with no MADRAS end date,
 - missing work flows where status changes have occurred, and the data has not yet been sent to MADRAS; this includes ICPs that are end dated but do not have a final reading, and
 - profile GXP checks, which detect unexpected use of the GXP profile.

Review of submission data created by EMS

EMS provides all submission data to Simply Energy for review prior to submission to the reconciliation manager.

I walked through the process to review submission data using the Power Query Validation tool. The tool compares the total submission volume (HHR volumes + NHH volumes + DFP volumes from the GR040) against the billed data and previous submissions for reasonableness.

ICP and meter register level AV080 submission data is provided and reviewed to identify any ICPs with unusually high or low consumption. These outliers are checked to make sure the data is accurate.

In some cases, errors were not detected through these validations prior to submission, due to workloads and other priorities.

Aggregation of submission data

The process for aggregating the AV080 was examined by checking all NSPs for March 2020 for CTCX and 10 NSPs for March 2020 for CTCX. Compliance is confirmed.

The aggregation and zeroing of submission data was reviewed for existing trader codes managed by Simply Energy. The GR100 ICP comparison reports are reviewed, to confirm whether any aggregation lines require zero values to be inserted. Requests for zero lines to be inserted are provided to EMS but are usually only added to the AV110 report.

GR170 and AV080 files for three revisions were compared for CTCX. All NSPs in the GR170 were included in the AV080.

Description	Recommendation	Audited party comment	Remedial action
AV080 zeroing process	<p>CTCS/ CTCX</p> <p>The zeroing process is currently completed for the AV110 but also needs to be completed for the AV080 to ensure future compliance.</p> <p>Identify instances where an AV080 aggregation line has been reported in a previous revision, but not the current revision and add a zero line.</p>	Processes have been updated to check for previous submissions in the AV080.	Identified

CTCX and CTCS HHR submission

Up to 31/05/20:

- EMS collected and validated HHR data and created HHR submissions for CTCX.
- EMS collected and validated HHR data and created any permanent estimates and corrections required and supplied the validated HHR data including estimates and corrections to Simply Energy in EIEP3 format for CTCS. Simply Energy loaded these validated volumes into Datahub to produce reconciliation submissions. Further validation was conducted by Simply Energy to check for unexpected zeros and compare billed and submission volumes.

From 01/06/20, EDMI and AMS began supplying HHR data directly to Simply Energy, and Simply Energy has validated the data and created HHR submissions for CTCX.

Simply Energy reviews the GR090 ICP missing files, and takes action as required to ensure that ICPs are correctly included or excluded in submission information for its existing codes. The Power Query tool is used to compare aggregated submission information to previous revisions, surrounding months, and billed data.

Audit outcome

Compliant

12.4. Grid owner volumes information (Clause 15.9)

Code reference

Clause 15.9

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Audit commentary

Contact is not a grid owner; compliance was not assessed.

Audit outcome

Not applicable

12.5. Provision of NSP submission information (Clause 15.10)

Code reference

Clause 15.10

Code related audit information

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

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

Audit observation

The registry list and NSP table were reviewed.

Processes to provide NSP volumes submissions as an agent were reviewed.

Audit commentary

Contact Energy is not an embedded network owner but acts as an agent for some embedded networks and provides NSP volume submissions on their behalf.

CTCT

NSP gate meter data is provided by AMS (AMCI). NSP volume information is imported into HDM and validated according to the HHR processes described in **section 9.6**, and then imported into SAP along with the other validated HHR data. NSP volume submissions are generated from SAP and validated against HDM and the residual load.

AMS confirmed that there have been no meter defects which affected information accuracy or clock synchronisation issues. Three ICPs had estimated data entered when their meters were replaced, and I confirmed zero estimates were correctly added for the missing trading periods.

No late submissions were identified.

CTCS and CTCX

NSP volumes submissions have been provided for SPO0011SPOREN since 01/03/20. EMS produces the submissions as an agent, and confirmed that there have been no corrections, estimates, or issues affecting accuracy.

No late submissions were identified.

Audit outcome

Compliant

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

Generation submissions are produced by CTCT. Data is no longer required to be sent to the Pricing Manager, only the Grid Owner.

Audit commentary

The NSP volumes submission is produced from SAP, using the same process as is applied for embedded network submissions. Contact validates the NSP volumes submissions by:

- checking for missing trading periods and transferring the missing data from MV90/Oracle to SAP or creating an estimate as required,
- reviewing daily profile data for each NSP meter in SAP to ensure that they have passed validation, and
- completing a comparison between its AV130 submission and the data in Oracle and investigating any exceptions.

I walked through the validation process and compared a sample of data from the May 2020 NSP volumes submission to the source data in MV90/Oracle. Compliance is confirmed.

One alleged breach occurred during the audit period in relation to NSP volumes. Generation volumes were under submitted, due to an error when producing the AV130 submission.

Reference	Date	Clause	Summary	Status	Result
2004CTCT1	26/05/20	Part 15 clause 15.2A	CTCT submitted incorrect NSP volumes data to the RM on BD 4 for the March 2020 consumption period.	Fact finding	No result yet

AV130 files are produced for generation NSP volumes and embedded network gateway data. The generation volumes were validated but re-running the process for embedded networks before the report was produced resulted in the generation data set becoming corrupted and some trading period volumes being replaced by zeros. The corruption occurred because the generation data does not have an ICP and must be moved to be recorded against a virtual POC for submission, and re-running the process corrupts the existing dataset.

The AV130 submission was produced from the corrupted dataset. The error was not detected prior to submission because:

1. the user had validated the dataset earlier in the day, and had not realised it had become corrupted between validation and generating the final report,
2. the period was during COVID-19 lockdown, making it difficult to confirm what the expected volumes were, and
3. independent review of the submission was not completed prior to submission due to workload, and difficulties working remotely during COVID-19.

Contact identified the error as soon as the initial reconciliation results were published and worked to resolve it as quickly as possible.

Additional controls have since been put in place to compare the NSP volumes submission to the generation data in Oracle prior to submission. Communication and task scheduling have been improved to prevent the embedded network submissions from being re-run before the generation AV130 is finalised. The embedded networks are to be transferred to Simply Energy and will no longer be produced from SAP.

In **section 9.6** I have recommended that Contact reinstate the check to ensure that the generation consumption is in line with expectations.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.6 With: Clause 15.11 From: 01-Mar-20 To: 31-Mar-20	CTCT Alleged breach 2004CTCT1 recorded that CTCT submitted some incorrect NSP volumes information to the RM for the March 2020 initial allocation. Potential impact: High Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 6		
Audit risk rating	Rationale for audit risk rating		
High	The controls are rated as moderate, as they are sufficient to ensure submission is accurate most of the time. The impact on settlement is high, based on the kWh difference, but washed out with revision 1.		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has implemented the additional checks to compare volumes received by our Generation metering system (MV90) with our SAP submission system. We have also escalated this issue to the Vendors of our SAP submission system as two attempted system fixes have failed to resolve this issue.		June 2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Contact has implemented the additional checks to compare volumes received by our Generation metering system (MV90) with our SAP submission system. We have also escalated this issue to the Vendors of our SAP submission system as two attempted system fixes have failed to resolve this issue.		June 2020	

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

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

Audit observation

Alleged breaches during the audit period were reviewed to determine whether any reconciliation submissions were late. Corrections were reviewed in **sections 2.1, 8.1 and 8.2**.

Audit commentary

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

CTCT

NHH volumes

Corrections are discussed in **sections 2.1, 8.1 and 8.2**. Inactive consumption is well managed, and all ICPs with inactive consumption identified at the time of the audit had been investigated and corrections were either completed or in progress. Corrections relating to inactive consumption for ICPs 0000470070HB2B2 and 0000246174TP7F1 identified during the 2019 audit have been processed.

Processes are in place to validate submission data, and correct errors prior to submission. Some data has not been corrected at the next available opportunity for submission.

- As described in **section 12.8**, some ICPs invalidly had forward estimate created due to system defects or because permanent estimates were not entered by revision 14.
- Unmetered volumes for 0000036759CP7C2 and 0006168329RN457 were incorrect for May 2020 and were corrected during the audit. ICP 0000036759CP7C2 had initially reported zero unmetered load due to a settlement unit assignment error and 0006168329RN457 had an incorrect effective date applied. Revised data will be washed up.
- In some circumstances, actual readings are recorded in SAP against the meter read order date, instead of the date that the reading was taken. This results in incorrect information being used to calculate historic estimate. For instance, ICP 0000017802EAAC8 had readings received for two of the four registers on 18/06/20, and the AMI reads for the missing registers for 17/06/20 were entered into SAP against the open meter read order with a read date of 18/06/20. Where a read is not obtained on the meter read order date, SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers and records it as actual against the meter read order date. An exception is generated where the read dates do not match, but they are bulk closed without investigation.
- Datacol provided readings up until early 2020, after which all reads were provided by MRS. I found some Datacol files where the “true read flag” was not populated, which prevented the reads being imported into SAP and the meter read order was closed with an estimated read. I verified that other Datacol files with the “true read flag” validly populated were correctly imported. MRS confirmed that during the period where reads were being provided from SevenX (Datacol) and MeterOr (MRS) there were some files where the “true read flag” was not correctly populated. The issue was not fully investigated because the ICPs were in the process of migrating to MeterOr which resolved the issue.

HHR volumes and aggregates

As discussed in **section 11.4**, some ICPs were missing from submissions due to incorrect settlement unit data or delays in creating profiles to store HHR data. Revised data will be provided through the revision process.

During the 2019 audit I found ICP 0278411762LC033 was missing from the HHR aggregates submission in April and May 2019 due to a data set up error. I confirmed the issue is cleared and the ICP was correctly included in later revisions.

ICP days

As described in **section 11.2**, ICP days were not reported correctly where settlement unit information was incorrect in SAP, or a system defect resulted in an incorrect submission type being applied. Contact has been working to resolve these issues before revision 14, and the ICP days differences are generally small.

CTCX

NHH volumes

As discussed in **section 6.7**, the downgrade for ICP 0000022997EA768 had NHH end reads corresponding to the end of the first day as HHR sent to EMS because of a copy and paste error. Simply Energy intends to check and update the readings to ensure that all consumption is captured.

ICP days, HHR volumes and aggregates

EMS omitted ICP 0158947339LC9D1 from all revision submissions after Simply Energy commenced producing HHR aggregates and volumes from June 2020. EMS reinstated the ICP on 06/07/20 and will ensure it is included in future revision submissions for periods up to May 2020.

CTCS

NHH volumes

There was a large NHH submission difference for June 2020, caused by one file of new ICPs which failed to be uploaded in MADRAS because one mandatory field (GXP) was blank for one row. The failure was not identified until after the initial submission. Simply Energy validates the files before they are uploaded to the RM portal but did not detect the error largely because the ICPs had not been billed yet and workloads/other priorities did not allow sufficient time for checking. The difference was washed up in revision 1.

HHR volumes and aggregates

HHR submissions were understated for the May and June 2020 initial submissions because some ICPs were not set up in time, and temporary estimates were not created where data was missing. Revised data will be provided through the revision process.

Some HHR volumes estimates did not meet the reasonable endeavours requirements for June 2020, as discussed in **section 9.4**.

ICP days

HHR ICP days were not reported correctly where temporary estimates were not inserted for ICPs with missing days of data up to June 2020 revision 1.

NHH ICP days were not reported correctly because some ICPs were not set up in MADRAS, data issues prevented ICPs being sent to MADRAS, and/or incorrect start dates were applied. The issues were resolved through the revision process.

Billed volumes

The Mar-20 to Jun-20 billed volumes are inconsistent with the Mar-20 to Jun-20 submission volumes as discussed in **section 11.3**.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 12.7</p> <p>With: Clause 15.12</p> <p>From: 01-Jul-18</p> <p>To: 27-Jun-19</p>	<p>CTCT, CTCX and CTCS</p> <p>Some submission data was inaccurate and was not corrected at the next available opportunity.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Twice previously</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>		
Audit risk rating	Rationale for audit risk rating		
Medium	<p>The controls are rated as moderate overall:</p> <ul style="list-style-type: none"> For CTCT system changes have been made, and further changes are underway to address remaining issues. For CTCX the missing HHR revision data appears to be caused by an isolated administrative error, and the incorrect end date was a manual data processing error. For CTCS processes are in place, but their manual nature, workloads and other priorities resulted in them not being completed and errors not being detected prior to submission. <p>The impact is medium based on the volume differences identified, and corrected data will be provided through the revision process.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>CTCS/CTCX</p> <p>Omission of previously submitted data has been identified and will be resolved going forward for any future revisions.</p>			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>CTCS/CTCX</p> <p>Running temporary estimates on BD3 now will assist in resolving these issues.</p>		Date	

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).

The relevant reconciliation participant must, at the earliest opportunity, and no later than the month 14 revision cycle, replace volume information created using estimated readings with volume information created using validated meter readings.

If, despite having used reasonable endeavours for at least 12 months, a reconciliation participant has been unable to obtain a validated meter reading, the reconciliation participant must replace volume information created using an estimated reading with volume information created using a permanent estimate in place of a validated meter reading.

Audit observation

Three AV080 14-month revisions were reviewed to identify any forward estimate still existing. A sample of NSPs with forward estimate remaining were checked to determine the reasons for the forward estimate.

Audit commentary

CTCT

Review of three AV080 14-month revisions showed that some forward estimate remained.

Month	Forward estimate in Revision 14 (kWh)
Nov-18	290,831.5
Dec-18	333,804.8
Jan-19	183,691.1
Total	808,327.4

The meter read compliance process described in **section 6.8** is followed to attempt to obtain an actual read within 12 months. Where an actual read is not obtained, an automated process changes an existing estimate read to become a permanent estimate. These estimates are validated against previous actual readings where available.

The ten NSPs where forward estimate remained at revision 14 were reviewed to determine the reasons for the forward estimate. I found that forward estimate remained because:

1. Permanent estimates could not be validated for unread meters, and were not entered

Permanent estimates are scheduled to be created when an actual read is not received within 12 months, but in some cases permanent estimates are created late, or not created at all. Contact Energy only enters permanent estimates where they can be validated against actual validated readings.

2. Phantom meters defect

The "NR" settlement unit covers future periods where there are no readings or other information available to estimate consumption, and a default forward estimate of 25 kWh per day is applied. Contact found that some ICPs had "NR" settlement units as well as valid settlement units, because the "NR" settlement unit was not made obsolete when it was replaced. This had the effect of a phantom meter generating 25 kWh of forward estimate for the ICP.

The phantom meters have now been resolved, but there are still some phantom meter registers which are being investigated and resolved. The number of exceptions has reduced from 1,500 per month during the 2019 audit to around 20-30 per month, with only two ICPs affected in the February 2019 revision 14.

3. Disconnections on estimated reads

Only actual validated readings and permanent estimate readings are used to calculate historic estimate.

Where an ICP is disconnected an estimated reading forward estimate will be created between the last validated reading and the disconnection date until another validated actual reading is received. Also, some MEPs provide disconnection reads but not reconnection reads, which will result in consumption being estimated until the next actual reading is received.

Contact has implemented a system enhancement which allows use of permanent estimate reads for disconnection and reconnection, and actual or permanent estimate readings are now used as boundary readings for disconnection and reconnection. Some further enhancement is needed for situations where an ICP is disconnected and reconnected within a day to make sure the correct boundary readings are applied.

4. Incorrect settlement units

As discussed in **section 11.2**, SAP contains settlement units, which specify the submission parameters (e.g. active HHR, inactive NHH) for each time slice. These settlement units determine which reports the ICP appears on, and whether the ICP is included or excluded for the submission period. Submission is correct once the settlement units have been updated.

Contact has found some intermittent issues with the creation of settlement units. It appears that under certain circumstances creation of settlement units is not triggered when events occur. Ticket 35165 which resolved settlement unit assignment failures appears to have largely resolved these issues. The number of ICPs affected has decreased significantly, but some triggers are still being missed. It is believed that this may be because of clashes between the triggers being run overnight and other scheduled processes. Contact has changed the order that the overnight processes are run in and is completing analysis to determine why some triggers are still being missed.

The settlement unit issues are also caused by user updates being processed incorrectly, resulting in previous status history records being removed. This has been addressed through training.

5. Consumption record defect

For some ICPs, Contact received validated readings, but consumption records were not created, and the default "NR" settlement unit was applied. This typically occurred where registers were set up in error and not closed or removed completely, and was more likely for ICPs which had been supplied before the migration to SAP in 2014 and switched back in. System fixes were implemented in June 2020 to resolve these issues.

The existence of forward estimate at revision 14 is recorded as non-compliance below.

CTCX and CTCs

No revision 14 submissions have been produced yet for CTCX or CTCs.

Simply Energy has a process for creating permanent estimates as part of their correction processes; but does not routinely enter permanent estimates where reads cannot be obtained. When Simply Energy receives a read for a long-term unread site, a permanent estimate read is provided to EMS to ensure that all consumption is captured and reported for reconciliation within the 14-month period.

Some historic estimate is incorrectly labelled as forward estimate by MADRAS where seasonal adjusted shape values (SASV) published by the reconciliation manager are not available for part or all of a read to read period. This primarily affects ICPs with the PV1, SBL, SFI and UNM profiles.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 12.8</p> <p>With: Clause 4 Schedule 15.2</p> <p>From: Nov-18 r14</p> <p>To: Jan-19 r14</p>	<p>CTCT</p> <p>Some estimates were not replaced by revision 14.</p> <p>Potential impact: Medium</p> <p>Actual impact: Unknown</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>		
Audit risk rating	Rationale for audit risk rating		
Medium	<p>The controls are rated as moderate, because there are processes in place to attain readings by revision 14 and enter permanent estimate readings. Contact has made good progress on resolving the issues relating to phantom meters and consumption record defects and is working on the other issues which are causing permanent estimates.</p> <p>The potential impact is rated as low. There was 808,327.4 kWh of forward estimate over three months and the impact is dependent on the accuracy of these estimates. There are sound estimation processes, therefore I have recorded the audit risk rating as medium.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
We continue to identify and resolve these system and process issues with a dedicated team involving developers, system testers and users.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>We continue to resolve these system and process issues with a dedicated team involving developers, system testers and users.</p> <p>Contact is actively working with our meter reader provider who operates their own long term no access / high priority read process in parallel to retailer's efforts. We will start to utilise this additional provider process to increase our attainment levels.</p>		Ongoing	

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 for each ICP must comprise the following:

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

Audit observation

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

Audit commentary

CTCT

Compliance with this clause was assessed:

- all active ICPs with meter category 3 or higher have submission type HHR,
- unmetered load submissions were checked in **section 12.2**,
- some profiles requiring a certified control device are used but Contact is aware of the metering requirements of the profiles, and compliance was recorded in **section 6.3**; where the metering is not compliant with the requirements of the profile, Contact applies RPS for submission,
- no loss or compensation arrangements are required, and
- aggregation of the AV080, AV110, AV090 and AV140 submissions are covered in **sections 13.2, 11.2, and 11.4** respectively.

CTCX and CTCS

Compliance with this clause was assessed:

- all active ICPs with meter category 3 or higher have submission type HHR,
- unmetered load submissions were checked in **section 12.2**,
- CTCX did not use any profiles which required certified control devices while CTCS supplies five with profiles which require a certified control device; the AC020 report confirmed that all the affected ICPs had certified control devices,
- no loss or compensation arrangements are required, and

- aggregation of the AV080, AV110, AV090 and AV140 submissions are covered in **sections 13.2, 11.2, and 11.4** respectively.

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

AV080 submissions 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

CTCT

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

CTCX and CTCS

In some cases, historic estimate is incorrectly labelled as forward estimate. Where SASV profiles published by the reconciliation manager are not available for part or all of a read to read period, historic consumption is labelled as FSE (forward standard estimate) even though it is based on actual readings. For some profiles, shape values are never published, including PV1, SBL, SFI and UNM.

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

I reviewed the March 2020 AV080 submission for CTCS and confirm that forward and historic estimates are included and identified as such.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.10 With: Clause 3 Schedule 15.3 From: 01-Sep-19 To: 22-Jul-20	CTCS and CTCX Where SASV profiles are not available, consumption based on validated readings is labelled as forward estimate. Potential impact: None Actual impact: None 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 historic and forward estimate is correctly identified most of the time. There is no impact on settlement because the calculation is correct; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The systems issue that causes this is being addressed, we are looking to have this issue resolved by 30 November 2020.		30/11/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
As per above.			

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

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

Audit observation

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

Audit commentary

CTCT

The table below shows that all scenarios are compliant. The check of calculations included confirming that readings and shape files were applied correctly.

The process for managing shape files was examined. There is an automated process where the RM web server is polled for new files. The new files overwrite the old files, and if a new file is not available, the most recent file remains. Manual intervention is only required where a file has failed to upload, and a BPEM is created to alert the user to the failure. Typically, failures occur only if a data value in one of the fields is not set up in SAP. The user will enter the data value in SAP's maintenance tables, and then move the file back to the source folder, so that it will be picked up for import.

Test	Scenario	Test expectation	Result
a	ICP becomes Active part way through a month	Consumption is only calculated for the Active portion of the month.	Compliant
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Compliant
c	ICP become Inactive then Active again within a month.	Consumption is only calculated for the Active portion of the month.	Compliant ²
d	ICP switches in part way through a month on an estimated switch reading	Consumption is calculated to include the 1st day of responsibility.	Compliant
e	ICP switches out part way through a month on an estimated switch reading	Consumption is calculated to include the last day of responsibility.	Compliant
f	ICP switches out then back in within a month	Consumption is calculated for each day of responsibility.	Compliant
g	Continuous ICP with a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
h	Continuous ICP without a read during the month	Consumption is calculated assuming the readings are valid until the end of the day	Compliant
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Compliant
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Compliant
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Compliant

² The ICP example became HHR when it was reconnected, and was compliant.

Test	Scenario	Test expectation	Result
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 have been validated against actual readings from another source.	Compliant – forward estimate was calculated, and the customer reads were ignored
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate, unless they have been validated against actual readings from another source.	Compliant – forward estimate was calculated, and the photo reads were ignored
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant

CTCS and CTCX

Historic estimate is prepared by EMS using the MADRAS system. The table below shows that all scenarios which had occurred are compliant.

Simply Energy downloads seasonal adjusted shape values (SASV) from the RM portal after each allocation and provides them to EMS via SFTP. EMS collects the files and loads them into MADRAS. I confirmed that the correct SASV were applied as part of the historic estimate calculation review.

Customer and photo reads are used to calculate historic estimate if they are recorded as customer actual readings, and this read status is only applied where a reading has been validated against a set of validated readings from another source.

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.	Has not occurred
b	ICP becomes Inactive part way through a month.	Consumption is only calculated for the Active portion of the month.	Has not occurred
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.	Has not occurred

Test	Scenario	Test expectation	Result
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	Has not occurred
i	Rollover Reads	Consumption is calculated correctly in the instance of meter rollovers.	Has not occurred
j	Unmetered load for a full month	Consumption is calculating based on daily unmetered kWh for full month.	Compliant
k	Unmetered load for a part month	Consumption is calculating based on daily unmetered kWh for active days of the month.	Has not occurred
l	Network/GXP/Connection (POC) alters partway through a month.	Consumption is separated and calculated for the separate portions of where it is to be reconciled to.	Has not occurred for an ICP which was active before and after the NSP change
m	ICP with a customer read during the month	Customer reads are not used to calculate historic estimate, unless they have been validated against actual readings from another source.	Has not occurred
n	ICP with a photo read during the month	Photo reads are not used to calculate historic estimate, unless they have been validated against actual readings from another source.	Has not occurred
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

CTCT

Contact's forward estimates are calculated using the following methods, in order of priority:

1. daily average consumption with temperature adjustment from an average at the same time the previous year,
2. daily average consumption from the previous read to read period with temperature adjustment,
3. the daily average kWh received in the incoming CS file apportioned between all the connected meters, and
4. 25 kWh per day for X flow meters and 0 kWh per day for I flow meters.

If an ICP is vacant, daily average consumption of zero is applied for forward estimate.

A Forward Estimate Robot process reviews any ICPs with forward estimate over 10,000 kWh. The Robot checks whether the reads applied for forward estimate are aligned with the consumption history. If they are aligned, the case is closed. If they are not aligned, the forward estimate is zeroed out, and an exception is generated and logged.

Forward estimate is monitored as part of the pre-submission checks, and any anomalies are investigated.

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 number of balancing areas where this target was not met.

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

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total
Nov 2018	3	3	3	3	250
Dec 2018	2	6	6	6	251
Jan 2019	0	0	0	0	252
Feb 2019	1	3	5		253
Mar 2019	1	1	2		255
Apr 2019	1	1	1		253
May 2019	0	0	0		253

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total
Jun 2019	0	1	0		255
Jul 2019	0	0	0		257
Aug 2019	0	0	0		259
Sep 2019	0	0			260
Oct 2019	0	1			263
Nov 2019	1	2			263
Dec 2019	1	1			266

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

Month	Revision 1	Revision 3	Revision 7	Revision 14
Nov 2018	4.48%	3.93%	4.08%	3.98%
Dec 2018	3.69%	5.58%	5.98%	6.06%
Jan 2019	1.28%	-0.69%	-0.57%	-0.65%
Feb 2019	-2.08%	-3.32%	-3.84%	
Mar 2019	3.17%	3.89%	4.36%	
Apr 2019	-2.32%	-3.61%	-3.34%	
May 2019	2.88%	2.79%	2.66%	
Jun 2019	-0.61%	-2.49%	-2.33%	
Jul 2019	3.97%	4.03%	3.55%	
Aug 2019	-0.47%	-1.58%	-2.07%	
Sep 2019	3.00%	2.48%		
Oct 2019	2.27%	2.49%		

Month	Revision 1	Revision 3	Revision 7	Revision 14
Nov 2019	2.41%	2.80%		
Dec 2019	-0.34%	0.70%		

I checked all differences over the threshold for months not reviewed in the previous audit, and found the issues were primarily because forward estimate was too high or low in relation to the actual readings when they were received. Historic estimate attainment was lower than usual following the change from Wells to MRS. Contact also acquired of a major group of irrigation customers, many of which had legacy meters and insufficient read history to allow accurate forward estimate.

CTCX and CTCS

EMS' forward standard estimate process is based on a "straight line" methodology, and where no historical information is available a "forward default" estimate of 55 kWh per day is used. The process for forward standard estimate calculation was checked and confirmed as accurate.

Simply Energy monitors differences between revisions using its Power Query tool.

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 number of balancing areas where this target was met.

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

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total
Sep 2019	-	-	-		1
Oct 2019	-	-	-		1
Nov 2019	-	-	-		1
Dec 2019	-	-			1
Jan 2020	-	-			1
Feb 2020	-	-			2
Mar 2020	-	-			2
Apr 2020	-				1
May 2020	-				1

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

Month	Revision 1	Revision 3	Revision 7	Revision 14
Sep 2019	-6.11%	-6.48%	-6.48%	
Oct 2019	-0.07%	-0.07%	-0.09%	
Nov 2019	0.00%	0.00%	0.00%	
Dec 2019	0.00%	-0.20%		
Jan 2020	-0.34%	-0.34%		
Feb 2020	0.00%	-0.41%		
Mar 2020	0.06%	0.53%		
Apr 2020	1.90%			
May 2020	-12.37%			

I reviewed the differences and found they were small at kWh level (less than 3000 kWh). The differences are caused by forward estimate being too high or low relative to the actual data, or delays in sites being set up for settlement in MADRAS.

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

Month	Revision 1	Revision 3	Revision 7	Revision 14	Total
Mar 2020	-	-			12
Apr 2020	-				14
May 2020	-				14

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

Month	Revision 1	Revision 3	Revision 7	Revision 14
Mar 2020	-22.73%	-67.98%		
Apr 2020	59.24%			
May 2020	0.00%			

The main reason for the differences default forward estimate for CTCS was changed from 20 kWh per day to 55 kWh per day, resulting in large differences attributed to ICPs with default forward estimate for March 2020 revision 3 and April 2020 revision 1.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.12 With: Clause 6 Schedule 15.3 From: Feb-Apr 19 and Nov-Dec 19	CTCT Inaccurate FE caused the thresholds not to be met in some instances. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong, as they are sufficient to ensure compliance to an acceptable level. Initial data is replaced with revised data and washed up.		
Actions taken to resolve the issue		Completion date	Remedial action status
Contact has implemented an improvement to its initial estimation process for newly acquired ICPs by using the daily average KWH value provided in the CS file as the basis of our estimation until there are sufficient reads obtained by Contact to provide as sufficient source of information to use for estimation. We are continuing to work with our non AMI meter reading provider to improve read attainment and to also targeting the long term no access properties		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We are continuing to work with our non AMI meter reading provider to improve read attainment and to also targeting the long term no access properties		Ongoing	

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 reports were 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

CTCT

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 15 profile changes and confirmed all were changed on an actual or permanent estimate reading.

0000005951TECC (19/05/20) registry profile change was a registry data correction only and was updated from the day prior to the update date, instead of the date the profile applied in SAP. This is recorded as non-compliance in **section 2.1**.

CTCX and CTCS

Simply Energy's policy is to complete profile changes on actual or permanent estimate readings.

CTCX had two ICP upgrades during the audit period, and no other profile changes. There were validated actual readings on the day that the profile change took effect.

CTCS had no profile changes, upgrades, or downgrades during the audit period.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

For each category 3 of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.

For each category 1 or category 2 metering installation, a reconciliation participant must provide to the reconciliation manager:

- *Half hour submission information; or*
- *Non half hour submission information; or*
- *A combination of half hour submission information and non half hour submission information*

However, a reconciliation participant may instead use a profile if:

- *The reconciliation participant is using a profile approved in accordance with clause Schedule 15.5; and*
- *The approved profile allows the reconciliation participant to provide half hour submission information from a non half hour metering installation; and*
- *The reconciliation participant provides submission information that complies with the requirements set out in the approved profile.*

Half hour submission information provided to the reconciliation manager must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *trading period*

The non half hour submission information that a reconciliation participant submits must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *consumption period or day*

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 NHH volumes is discussed in **section 12.3**, aggregation of HHR volumes is discussed in **section 11.4** and NSP volumes are discussed in **section 12.6**.

Audit commentary

No report aggregation discrepancies were identified. 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
- trading period for half hour metered ICPs and consumption period or day for all other ICPs.

The submitted data was also compared to billed data and appeared reasonable for CTCT and CTCX.

CTCX had some significant differences between billed and submitted data. For September 2019 to February 2020 I confirmed that the differences between billed and submitted data were reasonably consistent with the volumes allocated to the SB ICPs, which are included in the billed data but excluded from the submission data. From March 2020 onwards, the relationship between billed and submitted data does not appear reasonable, and it appears there is an issue with the billed and/or submission data which requires investigation and correction. Simply Energy is investigating the cause of the difference, which is recorded as non-compliance in **section 11.3**.

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 5, the second digit is rounded up, and

If the digit to the right of the second decimal place is less than 5, the second digit is unchanged.

Audit observation

I reviewed the rounding of data on the AV080, AV090 and AV140 and reports as part of the aggregation checks. AV130 submissions were reviewed in **section 12.6**.

Audit commentary

Submission information is appropriately rounded to no more than two decimal places for CTCT, CTCX and CTCX.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

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

I reviewed nine AV080 reports to confirm that historic estimate requirements were met.

Audit commentary

CTCT

The quantity of historical estimates is contained in the submission file and is not a separate report. The proportion of historic estimate in the revision files was checked for nine reports, and the table below shows that compliance has not been achieved in all instances.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Nov 2018			227	342
Dec 2018			234	343
Jan 2019			244	345
Jun 2019		309		349
Jul 2019		303		350
Aug 2019		310		350
Oct 2019	295			354
Nov 2019	302			356
Dec 2019	307			357

The table below shows that the percentage HE at a summary level for all NSPs is well above the required targets for 3 and 7-month revisions, but below the required target for the 14-month revision.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Nov 2018	-	-	99.83%
Dec 2018	-	-	99.79%
Jan 2019	-	-	99.88%
Jun 2019	-	97.11%	-
Jul 2019	-	96.85%	-
Aug 2019	-	97.58%	-
Oct 2019	92.08%	-	-
Nov 2019	91.78%	-	-
Dec 2019	93.01%	-	-

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment. Following the transition to MRS in July 2019, resourcing issues resulted in poor read attainment in some areas and communications to customers regarding read attainment were temporarily suspended as a result. This combined with the COVID-19 lockdown, caused a decrease in read attainment and historic estimate proportions.

Permanent estimates are only entered where the readings can be validated against a set of actual validated readings, which has affected historic estimate proportions for revision 14.

System fixes and process improvements have reduced the volume of forward estimate produced by system defects (such as phantom meters) and process issues (such as not entering disconnection and/or reconnection reads, or not processing inactive consumption corrections on time).

CTCX

The quantity of historical estimates is contained in the submission file and is not a separate report. The proportion of historic estimate in the revision files was checked for three reports, and the table below shows that compliance has been achieved in all instances. No 7 or 14-month revisions were available.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Oct 2019	1	-	-	1
Nov 2019	1	-	-	1
Dec 2019	1	-	-	1

The table below shows that the percentage HE at a summary level for all NSPs is well above the required targets for 3-month revisions.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Oct 2019	100%	-	
Nov 2019	100%	-	
Dec 2019	100%	-	

CTCS

No 3, 7 or 14-month revisions had been completed.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 13.3</p> <p>With: Clause 10 of Schedule 15.3</p> <p>From: Nov 18-Jan 19 (r14), Jun-Aug 19 (r7) and Oct-Dec 19 (r3)</p>	<p>CTCT</p> <p>Historic estimate thresholds were not met for some revisions.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: 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 rated as strong because in most cases the thresholds were met, and processes have improved during the audit.</p> <p>The audit risk rating is low, because Contact were reasonably close to the target in all cases.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Contact's overall submission accuracy is very good and where we have not been able to meet the accuracy thresholds the market impact is very low based on the consumption volumes involved. It is pleasing to see that our efforts to improve our HE performance has now been assessed as strong controls.</p> <p>We recognise that the change in meter reading provider has impacted our Historic Estimate performance, however we have continued to progress other improvements in order to achieve compliance:</p> <ul style="list-style-type: none"> Taking AMI reading services from 2 additional MEPS meaning we now consume AMI reads from 7 MEPS 		Ongoing	Identified

<ul style="list-style-type: none"> Applying a Permanent Estimate read type as part of status change where no actual read was obtained as part of a disconnection / reconnection. Moving business customers with communicating AMI meters to month end read or near month end reading cycles. <p>We continue to work with our non AMI meter reading provider to improve read attainment and to also targeting the long term no access properties</p>		
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Contact is moving business customers that have communicating AMI meters to a target read date as close to month end as possible. Business load is quite sensitive to public holidays and in terms of irrigation – seasonal conditions, and our estimation routines struggle to recognise these periods. We expect this change will result in an improvement in our submission accuracy of between 0.5 and 1%.</p>	Ongoing	

CONCLUSION

Contact uses the CTCT, CTCS and CTCX participant codes.

- CTCT is managed directly by Contact and is used for NHH ICPs, HHR ICPs and generation.
- CTCS is managed by **Simply Energy Limited (Simply Energy)** as Contact's agent. CTCS customers are supplied by the Contact Energy brand and may be billed and settled as HHR, NHH or DUML. A pilot group of 100 ICPs switched in on 01/03/20, followed by a tranche of approximately 2,000 customers on 01/06/20. A further two tranches of around 3,000 ICPs are expected to switch in from CTCT over the next few months.
- CTCX is managed by Simply Energy as Contact's agent. CTCX customers are supplied by the Simply Energy brand, and are billed as HHR but may be settled as NHH if their metering does not meet HHR certification requirements.

Up to 31/05/20 EMS collected HHR data, and created HHR permanent estimates and submissions for CTCS and CTCX. From 01/06/20, EDM and AMS began supplying HHR data directly to Simply Energy, and Simply Energy has created the HHR submissions and permanent estimates for CTCS and CTCX. EMS creates NHH submission information for CTCS and CTCX.

Unless otherwise specified, the processes and non-compliances described in the report apply to all codes.

CTCT

CTCT has made steady progress in the management of registry information and switching.

1. Registry discrepancy processes are robust and the resolution of these has improved since the last audit.
2. The timeliness of new connections has improved
3. Discrepancy reporting for new connections has been reinstated to ensure correct active dates.
4. There is a process to identify and rectify reconnected ICPs with expired meter certifications.
5. There have been a number of fixes deployed for switching which has improved data accuracy.

CTCT has made significant improvements in the reading and reconciliation area during the audit period:

1. Progress has continued to be made with investigating and resolving issues affecting submission accuracy, such as settlement unit issues, phantom meters and investigation and correction of inactive consumption. Good prevention (system and process changes), detection (exception and validation reporting) and correction controls are in place, and the number of affected ICPs has dramatically reduced this year.
2. The number of reconciliation profile discrepancies has reduced from 17,257 in 2018, to 3,301 in 2019 and 337 during this audit. Contact has worked with MEPs to resolve the issues causing the profile discrepancies.

The following key areas require some improvement to increase compliance:

1. **New connections**
Unmetered new connections were disproportionately represented in the late new connections. I recommend this process is reviewed.
2. **MEP nominations**
Incorrect MEP nominations due to the MEP relationship between ORBs and SAP not being aligned.
3. **Long term BTS supplies**
Historically these haven't been closely managed. I found two examples of ICPs that have complete houses that have been on an unmetered BTS since 2012 and 2014 respectively. Contact are undertaking a data cleanse project of these.

4. Distributed unmetered load

Some distributed unmetered load issues are still existing, leading to incorrect submission information. Some audit reports are overdue. Contact are working with their customers regarding these issues.

5. Switching

The RR process for AMI read requests received within five days of the event date needs reviewing to ensure these are not rejected if an actual read has been sent.

6. Read attainment

The read attainment process still begins after 130 days, making it unlikely that the best endeavours requirements for read attainment will be met where the period of supply is less than 11 months. Following the transition to MRS in July 2019, resourcing issues resulted in poor read attainment in some areas and communications to customers regarding read attainment were temporarily suspended as a result. This combined with the COVID-19 lockdown, caused a decrease in read attainment during the audit period.

7. Read dates

Where a read is not obtained for all registers on the meter read order date, SAP retrieves the nearest actual reading within the last three days for AMS, Smartco, Metrix and FCLM and the nearest actual reading within the last two days for all other providers, and records it as an actual reading against the meter read order date. An exception is generated where the read dates do not match, but they are bulk closed without investigation. This results in inaccurate data being input into the historic estimate process, and could result in invalid switch readings if an ICP switched out on an affected read.

8. HHR ICP missing and ICP days

As AMI ICPs move from NHH to HHR settlement, there is an increased volume of ICP missing differences due to timing, which makes it difficult to monitor the ICP missing report. Contact identifies ICPs with submission type and ICP days discrepancies, but sometimes the cause of the discrepancy was not correctly identified which led to some settlement unit errors not being corrected and issues remaining for later revisions. Due to workloads there were also sometimes delays in processing corrections required to resolve ICP missing issues. Further training has been provided and process improvements are being made.

9. NSP volumes validation

Validation checks for generation submission have decreased over time, and there was a breach during the audit period relating to under submission of generation data. Safeguards have been put in place to prevent recurrence, and extra validations to check the submission data is reasonable and consistent with the generation team's expectations prior to submission would be beneficial.

CTCS and CTCX

CTCS and CTCX have procedures in place to ensure compliance, but the manual nature of some of these processes, workloads, and competing priorities have meant that the processes have not always been followed as intended (e.g. completing spot checks instead of full validation) or completed on time (e.g. generation of HHR temporary estimates for the June 2020 initial submission, or setting up ICPs in time for the initial submission). This resulted in some significant differences between initial submissions for NHH volumes, HHR volumes, and ICP days as further validation was completed for later revisions and issues were resolved.

The audit fell at a difficult time, with CTCS just receiving the first major tranche of customers. Some issues beyond Simply Energy's control impacted on their ability to complete all their processes on time, like a generation ICP being switched in error, and ICPs being switched in on an unexpected date. I believe that if the team were under less pressure, more of the processes would have been completed, but with the increase in customer numbers it still would have been challenging.

Simply Energy is aware of these issues, and intends to automate processes to allow them to be completed more efficiently but finding the time to do this may be difficult with current workloads.

Conclusion

The audit found 48 non-compliance issues and 20 recommendations are made.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of 101, which results in an indicative audit frequency of three months.

For 44 of the 48 non-compliances, controls were assessed to be moderate or strong. Two of the non-compliances with weak controls related to meter reading attainment, one to rounding of volume data prior to preparation of submissions, and one to correcting information as soon as practicable. Two of the 48 non-compliances were assessed to have a high impact, and related to submission of distributed unmetered load and NSP volume submissions. Contact is continuing work to resolve distributed generation processes, and the NSP volume information has been corrected through the revision process and improved controls have been implemented.

Contact's audit responses indicate that they accept the non-compliances and recommendations. By time this report was finalised, Contact had already improved some processes to prevent recurrence, and further system and process changes were investigated or tested. Some of the non-compliances were caused by the initial migration of ICPs to CTCS and the associated increase in workloads. Lessons learned from the initial migration are expected to help improve compliance for any future transfers between CTCT and CTCS.

I recommend that the next audit is completed in a minimum nine months.

PARTICIPANT RESPONSE

Contact have reviewed this report and their comments are contained within its body.