

ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT



For



CONTACT ENERGY LIMITED
NZBN: 9429038549977

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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 and CTCS participant codes.

CTCT is managed directly by Contact. CTCT is used to supply meter category five generation ICPs, NHH and HHR settled category one or two ICPs and unmetered load. ICP 1001157629CK617 has a category three meter and HHR submission type but is expected to be downgraded once some issues with neighbouring ICPs are resolved.

CTCS is managed by **Simply Energy Limited (Simply Energy)** as Contact's agent. CTCS is used to supply customers supplied under the Contact Energy and Simply Energy Brands as well as Compass Communications or Plains Power which CTCS provides white label services for. CTCS supplies ICPs with meter categories one to five and unmetered load including distributed unmetered load. CTCS produces its own HHR submissions and EMS produces NHH and DUML submissions.

Unless otherwise specified, the processes and non-compliances described in the report apply to all codes. Compliance is summarised by functional area in the tables below.

CTCT

Summary	Key areas for improvement
Registry and static data accuracy	
<p>The new exception management tool is improving data validation and being used to identify and correct historic inaccuracies. More reports are being migrated to databricks, and the teams are working to improve their processes.</p> <p>Contact has continued its validation and cleansing of unmetered load data, and unmetered load settlement units and unmetered load accuracy continue to improve.</p> <p>There were some late registry updates and some inaccurate registry information.</p>	<p>Exceptions are generally identified promptly through reporting, but there can be delays in investigating and correcting the exceptions which leads to inaccurate registry, switching and submission information.</p> <p>Some former SAS reports are no longer available and have not been implemented yet in databricks. In some cases, this has resulted in validation reports being ceased.</p> <p>Compliance for distributed generation could be improved by considering gifting generation where the customer does not agree to install metering for the I flow.</p>
Switching	
<p>Compliance was high and the switching process is well managed.</p> <p>Given the volume of switches completed there were a small number of breaches for late information. Most data checked was accurate.</p>	<p>There were a small number of files where SAP had produced incorrect content. Contact has raised tickets to resolve the issues, which included the premises disconnected AN code being applied where the disconnection job was raised but not completed, a small number of CS files with incorrect last actual read dates, and/or read types, and application of non-compliant event dates in AN files.</p> <p>In some cases, switch file content was inaccurate because underlying ICP and meter data was incorrect in SAP at the time of the switch, such as meters which had not been installed in SAP, implausible readings being approved, or incorrect ICP or meter set up information. Ensuring that</p>

Summary	Key areas for improvement
	<p>BPEMs are actioned, and exceptions are resolved quickly will improve the accuracy of switching files.</p> <p>Ensure that staff obtain at least two validated actual readings before requesting an RR.</p>
Read import and validation	
<p>Read import and validation processes are operating as expected, and the treatment of customer reads is compliant.</p> <p>Not all meter events and clock synchronisation events are consistently reviewed, and some events requiring action or correction may be missed.</p> <p>Reads recorded against meter read orders are truncated on import, which is a technical non-compliance.</p>	<p>Consistently review and action meter and clock synchronisation events. Contact is investigating making arrangements for MEPs to review the events and provide any events which require action to improve compliance.</p>
Read attainment	
<p>NHH manual read attainment processes are sufficient to usually meet the code requirements.</p> <p>NHH AMI read attainment processes are in place, but not always completed promptly due to workloads.</p>	<p>Clarifying responsibilities and timeframes for moving non-communicating HHR settled meters to NHH submission after following up the issue with the MEP. There are existing processes in place but some ICPs are remaining on HHR submission for extended periods with no meter readings being received.</p>
Volume and reading corrections	
<p>Compliant processes are in place for corrections, but some ICPs requiring correction are not identified promptly and some ICPs which require correction are not investigated and corrected promptly.</p> <p>Correction and estimation processes are operating as expected.</p>	<p>There are some delays in investigating and processing bridged meter and inactive consumption corrections. Based on the information provided during the audit, the impact is high, but revised submission information will be provided once the corrections are made.</p> <p>Status and profile corrections relating to periods more than 14 months ago are not consistently identified and wash up data for periods more than 14 months ago is not always provided. I recommend improving this process to capture consumption within the last 14 months.</p>
Submission	
<p>The reconciliation processes are compliant, but sometimes incorrect data is produced where underlying data is incorrect.</p> <p>The new exception management tool is now in use and continuing to be refined, and this is improving identification of errors so that they can be resolved.</p>	<p>Contact is aware of reconciliation issues with certain ICPs and is working to resolve them, including those where unmetered load needs to be investigated or metering set ups changed.</p> <p>Contact is continuing to investigate known issues with SAP's settlement units not being consistently updated. The new exception management tool helps with this.</p> <p>As for switching, there are some issues with inaccurate underlying meter and ICP data which causes issues for the</p>

Summary	Key areas for improvement
Generation processes are operating effectively.	<p>SAP processes. Ensuring that BPEMs are actioned, settlement units are correct, and exceptions are resolved quickly will improve the accuracy.</p> <p>Corrections are also not consistently completed as soon as practicable which results in inaccurate data and in some cases makes them more difficult to process as more billing occurs in the meantime, and customers may move or switch out.</p> <p>Status and profile corrections relating to periods more than 14 months ago are not consistently identified and wash up data for periods more than 14 months ago is not always provided. I recommend improving this process to capture consumption within the last 14 months.</p>

CTCS

Summary	Key areas for improvement
Registry and static data accuracy	
<p>Registry validation processes are well managed, with very few exceptions.</p> <p>Field services work is closely monitored and tracked through to registry, salesforce and DataHub update.</p> <p>There were some late registry updates, and I saw evidence that errors were being detected and corrected.</p>	None, the process is well managed.
Switching	
<p>Compliance was high and the switching process is very well managed.</p> <p>There were no switching breaches and almost all data checked was accurate. Where inaccuracies occurred, they were isolated data entry issues.</p>	None, the process is well managed.
Read import and validation	
<p>Read import and validation processes are operating as expected.</p> <p>Meter event validation is compliant for some MEPs and improvements are being made for other MEPs.</p>	<p>Continue with work to build meter event validation reporting.</p> <p>CTCS is investigating a solution to prevent replacement of actual interval data with estimates when part day HHR data is received.</p>
Read attainment	
Procedures are in place to ensure the best endeavours requirements are met and read attainment has improved this audit period.	Ensuring that there are at least three attempts to resolve the issue using at least two communication methods consistently.

Summary	Key areas for improvement
There are processes to identify HHR meters without regular reads and move them to NHH profiles as necessary.	
Volume and reading corrections	
Compliant processes are in place for bridged and faulty meters, meter changes and incorrect multipliers. A small number of inaccuracies and missed corrections were identified. Some HHR corrections were not processed or were not processed accurately.	Status and profile corrections relating to periods more than 14 months ago are not consistently identified and wash up data for periods more than 14 months ago is not always provided. I recommend improving this process to capture consumption within the last 14 months. Improve the HHR correction and estimation process to ensure that the reason for correction or estimation is taken into account when preparing the estimate or correction, and that any issues referred by the MEP or agent are appropriately actioned.
Submission	
The reconciliation processes are compliant, but sometimes incorrect data is produced where underlying data is incorrect. The historic estimate thresholds were not always met, and there are some minor madras technical issues relating to incorrect classification of historic estimate as forward estimate.	Simply Energy is working on ensuring that the best endeavours requirements for read attainment are consistently met, and then will establish a permanent estimate process.

Conclusion

The audit found 42 non-compliance issues (the same as the previous audit) and 11 recommendations are made. The audit risk rating has decreased from 106 in the previous audit to 99.

For CTCT across most areas I found that improvements had been made, especially to processes for validation and identification of issues. Because investigation and correction of these identified issues has not consistently occurred as soon as practicable, and reporting provided by CTCT indicated that these outstanding corrections are likely to have a high impact on submission volumes, there has not been a decrease in the total audit risk rating. Once the backlog of ICPs requiring investigation and correction is cleared, I expect that the audit risk rating will start to decrease because having fewer outstanding corrections will reduce the impact ratings.

CTCS supplies a much smaller number of ICPs than CTCT and has less activity. Compliance for CTCS has improved during the audit period, and they are aware of and working to find solutions for the issues identified.

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 recommends that the next audit be completed in three months. I have considered this in conjunction with Contact's responses which indicate that they plan to take action to prevent future non-compliance, and recommend that the next audit is undertaken in a minimum of ten months on 30 January 2025. This recommendation is consistent with the previous audit's relationship between the audit risk rating and audit period, and recognises that improvements have been made and many more are in progress, as well as that the Christmas-New Year break falls late within the audit period. This will ensure appropriate audit oversight within a reasonable period of time. The matters raised are detailed in the table below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Relevant information	2.1	10.6, 11.2, 15.2	<p>CTCT Some inaccurate data is recorded and was not updated as soon as practicable. Some previous audit corrections not carried out.</p> <p>CTCS Some inaccurate data is recorded and was not updated as soon as practicable.</p>	Moderate	High	6	Identified
Electrical connection of a point of connection	2.11	10.33A	<p>CTCT 90 new ICPs did not have their meters certified within five business days of initial electrical connection. 207 reconnected ICPs did not have their meters certified within five business days of reconnection. Metering for five ICPs was not recertified on un-bridging. Service orders have been raised for the affected meters to be recertified.</p> <p>CTCS Eight new ICPs did not have their meters certified within five business days of initial electrical connection.</p>	Moderate	Low	2	Identified
Arrangements for line function services	2.12	11.16	<p>CTCS CTCS traded on ICPs connected to the TOLQ network where there was no arrangement or agreement in place.</p>	Moderate	Low	2	Identified
Meter bridging	2.17	10.33C and 2A of Schedule 15.2	<p>CTCT For four of the 158 bridged meters checked the MEP was notified of a bridged meter later than one business day from when Contact was notified. Volume corrections were not created or not created correctly for 11 bridged meters.</p>	Moderate	Medium	4	Identified
Changes to Registry	3.3	10 Schedule 11.1	<p>CTCT 1,507 late updates to "active" status. 785 late updates to "inactive" status. 2,615 late trader updates. 169 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP.</p> <p>CTCS Six late updates to "active" status. 23 late updates to "inactive" status. 94 late trader updates.</p>	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			Three ANZSIC code updates were made more than 20 business days after CTCS began trading at the ICP.				
Trader responsibility for an ICP	3.4	11.18	CTCT 0005265000ALF50 was a backdated new connection, and the MEP nomination was not processed until the ICP became “active”.	Strong	Low	1	Identified
Provision of information to the registry	3.5	9 Schedule 11.1	CTCT 289 late updates to “active” status and MEP nominations for new connections. Four of a sample of 43 ICPs with “active” date discrepancies had incorrect “active” status dates. Two were corrected during the audit and two remain incorrect. 169 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP. CTCS 14 late updates to “active” status for new connections. Two late MEP nominations for new connections. Three ANZSIC code updates were made more than 20 business days after CTCS began trading at the ICP.	Moderate	Low	2	Identified
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	CTCT 14 ICPs had an incorrect ANZSIC code applied, and 12 were corrected during the audit.	Moderate	Low	2	Identified
Changes to unmetered load	3.7	9(1)(f) of Schedule 11.1	CTCT 11 ICPs had incorrect unmetered load details recorded. Nine were corrected as soon as practicable once the error was identified and revised submission information was provided at the first available opportunity. Two remain incorrect in SAP and/or the registry.	Moderate	Low	2	Identified
Management of “active” status	3.8	17 Schedule 11.1	CTCT 0000434474TPA6A had an incorrect status update to “active” on 4 December 2022 which has not been corrected. Two reconnected ICPs which had incorrect event dates and one ICP which had an incorrect status which were corrected during the audit. Four of a sample of 43 ICPs with “active” date discrepancies had incorrect “active” status dates. Two	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			were corrected during the audit and two remain incorrect.				
Management of Inactive status	3.9	19 of schedule 11.1	<p>CTCT</p> <p>One ICP which had an incorrect event date and status, which was discovered and corrected during the audit.</p> <p>Investigation and correction for ICPs with inactive consumption does not always occur as soon as practicable resulting in under submission of consumption which occurred during periods with "inactive" status.</p> <p>Contact's reporting shows there are potentially 636 ICPs with 549,610 kWh of "inactive" consumption which require investigation and correction.</p> <p>CTCS</p> <p>ICP 0001780783TG6A6 was incorrectly at "ready" status from 2021 to 2024 and was decommissioned during the audit.</p>	Moderate	High	6	Identified
Inform registry of switch request for ICPs - standard switch	4.1	2 Schedule 11.3	<p>CTCS</p> <p>One transfer NT file was issued with an incorrect switch type. The switch was withdrawn and re-requested with the correct switch type.</p>	Strong	Low	1	Cleared
Losing trader response to switch request and event dates - standard switch	4.2	3 and 4 Schedule 11.3	<p>CTCT</p> <p>Five of the 1,493 transfer switch AN files checked had incorrect response codes.</p>	Strong	Low	1	Identified
Losing trader must provide final information	4.3	5 Schedule 11.3	<p>CTCT</p> <p>Two CS breaches.</p> <p>Six transfer switch CS files contained an incorrect average daily kWh out of a sample of ten files with high or zero average daily kWh.</p> <p>Two CS files contained incorrect last actual read dates.</p> <p>One CS file contained an incorrect read type.</p> <p>CTCS</p> <p>Two CS files contained incorrect last actual read dates.</p> <p>One CS file contained an incorrect read type.</p>	Strong	Low	1	Investigating
Retailers must use the same reading	4.4	6(1) and 6A Schedule 11.3	<p>CTCT</p> <p>One RR breach.</p> <p>For one RR SAP had an incorrect read type recorded.</p>	Strong	Low	1	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			One RR was not supported by two actual reads and was accepted by the other trader.				
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	CTCT Six of the 369 switch move AN files checked had incorrect response codes. One E2 breach. Three ET breaches.	Strong	Low	1	Investigating
Losing trader must provide final information	4.10	11 Schedule 11.3	CTCT One CS file contained an incorrect read type. Three switch move CS files contained an incorrect average daily kWh. CTCS Three switch move CS files had incorrect last actual read dates. Three switch move CS files had their switch event read type recorded as actual, but should have been estimated. Three switch move CS file had incorrect average daily consumption.	Strong	Low	1	Investigating
Gaining trader changes to switch meter reading	4.11	12 of Schedule 11.3	CTCT 37 late RR breaches for switch moves. For three RRs SAP had an incorrect read type recorded. One RR was not supported by two actual reads and was accepted by the other trader.	Strong	Low	1	Identified
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	CTCT 45 SR breaches. 151 NA breaches. Nine out of 24 NW files checked had incorrect NW advisory codes applied.	Moderate	Low	2	Identified
Maintaining shared unmetered load	5.1	11.4	CTCT ICPs 0000020828WE426 and 0067025054WE352 had shared unmetered load calculation errors which were corrected in SAP and the registry upon discovery during the audit. Revised submission data will be provided through the wash up process.	Moderate	Low	2	Cleared
Distributed unmetered load	5.4	11 of schedule 15.3	CTCS 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 five of the databases managed. The DUML audit for NZTA Mainpower was due on 18 February 2023 which	Moderate	High	6	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			was extended to 31 July 2023 but has still not been completed.				
Electricity conveyed & notification by embedded generators	6.1	10.13	<p>CTCT</p> <p>Subtraction is used to determine the HHR load for ICP 1001157629CK617 until the issues causing the load for ICPs 1001158552CK7FD and 1001156589CKCAB to be metered through it are resolved.</p> <p>ICP 0000277231MP9F7 has generation metering data available from 6 June but needs to be set up correctly in SAP before submission data can be provided. There was no I flow submission data provided for January 2024.</p> <p>Five ICPs with PV1 profile were confirmed not to have generation and CTCT corrected the profiles on discovery during the audit.</p> <p>While meters were bridged, energy was not metered and quantified according to the code for 158 ICPs.</p>	Moderate	Low	2	Identified
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	<p>CTCT</p> <p>Some meter condition events were not received by CTCT because no meter lines were provided for an unread ICP (ICP 0000200438UNFD3).</p> <p>Some meter condition events were not reviewed because no BPEM was generated because an unexpected meter condition code was provided (ICP 1000497066PC4AB) or the ICP was vacant (ICP 0000314136MP3EA).</p>	Moderate	Low	2	Investigating
NHH meter reading application	6.7	6 Schedule 15.2	<p>CTCS</p> <p>The upgrade for ICP 0000052134HBB2B was made effective from the wrong date. The ICP was moved to HHR from 28 June 2023 consistent with the registry metering record, but should have been moved to HHR from 27 June 2023, consumption on the HHR register for the meter change date (estimated to be less than 5 kWh) was not reported.</p>	Strong	Low	1	Identified
Interrogate meters once	6.8	7(1) and (2) Schedule 15.	<p>CTCT</p> <p>For 13 ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>The meter read compliance process begins after 130 days with no readings so it is unlikely compliance will be achieved where the period of supply is less than this.</p>	Moderate	Low	2	Investigating

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
NHH meters interrogated annually	6.9	8(1) and (2) Schedule 15.2.	<p>CTCS</p> <p>For five of a sample of 20 ICPs unread in the 12 months ending 31 October 2023, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>The meter reading frequency report includes solely unmetered ICP 0001982631TG4C3.</p>	Strong	Low	1	Identified
NHH meters 90% read rate	6.10	9(1) and (2) Schedule 15.2	<p>CTCT</p> <p>For one ICP unread in the four months ending 31 October 2023, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>The meter reading frequency report indicated that reads had not been received in the four months ending October 2023 for some ICPs at MXQ0111 and TSS0011. Reporting from SAP confirmed all ICPs connected to these NSPs had actual validated readings in the four months ending October 2023.</p> <p>CTCS</p> <p>For two ICPs unread in the four months ending 31 October 2023, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>ICPs which had switched out prior to the end of October 2023 were included in the October 2023 meter reading frequency report in error.</p>	Moderate	Low	2	Investigating
Correction of HHR metering information	8.2	19(2) Schedule 15.2	<p>CTCS</p> <p>Two corrections for double intervals and one correction for a meter fault were not handled correctly.</p>	Strong	Low	1	Identified
Identification of readings	9.1	3(3) Schedule 15.2	<p>CTCT</p> <p>Two CS files had an incorrect read type recorded.</p> <p>Four ICPs which had undergone read changes had an estimated read type recorded in SAP but should have had an actual read type.</p> <p>CTCS</p> <p>Four CS files had an incorrect read type recorded.</p>	Strong	Low	1	Investigating
Meter data used to derive volume information	9.3	3(5) of schedule 15.2	<p>CTCT</p> <p>Raw meter data is truncated upon upload into SAP meter read table and not when volume information is created.</p>	Weak	Low	3	Investigating

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Electronic meter readings	9.4	15 Schedule 15.2 2	CTCS ICP 0000545550NRC39 switched in on 1 November 2023, with a HHR TRUM meter. No meter readings were received so CTCS attempted to obtain readings from the previous trader (who confirmed they had not received any readings), the MEP, and EDMI. Meter readings were eventually provided by AMCI from 1 January 2024. No estimated data was provided in the November 2023 initial or revision 1 submission.	Moderate	Low	2	Identified
Electronic meter readings	9.6	17(4)(f)& (g) of schedule 15.2	CTCT Full AMI meter event logs provided by MEPs are not routinely reviewed. CTCS Full AMI meter event logs provided by MEPs have not consistently been reviewed and actioned, but improved processes are being implemented and data from Blue Current Assets NZ Limited is now consistently reviewed.	Weak	Low	3	Investigating
Calculation of ICP days	11.2	15.6	CTCT For November 2023 I found one NHH NSP ICP days difference and 11 HHR NSP ICP days differences out of a sample of 100 NHH and 100 HHR NSPs checked where SAP contained incorrect settlement units resulting in ICP days reporting errors. For April 2023 revision 7 I found 20 out of 20 differences between the registry and submission data occurred because SAP contained incorrect settlement units resulting in ICP days reporting errors.	Moderate	Low	2	Identified
HHR aggregates information provision to the reconciliation manager	11.4	15.8	CTCT Subtraction is used to determine the HHR load for ICP 1001157629CK617 until the issues causing the load for ICPs 1001158552CK7FD and 1001156589CKCAB to be metered through it are resolved. Two ICPs had submission against the incorrect NSP and were corrected as soon as practicable once identified. Revised submission information will be washed up. 11 NSPs in the November 2023 revision 1 submission and ten NSPs in the April 2023 revision 7 submission contained incorrect HHR volume information because of SAP settlement unit errors. CTCT intends to process corrections.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Creation of submission information	12.2	15.4	CTCT and CTCS Some submission information was not complete and accurate due to data accuracy issues.	Moderate	High	6	Identified
Grid connected generation	12.6	15.11	CTCT Alleged breach 2307CTCT1.	Strong	Low	1	Identified
Accuracy of submission information	12.7	15.12	CTCT and CTCS Some submission data was inaccurate and was not corrected at the next available opportunity.	Moderate	High	6	Identified
Permanence of meter readings for reconciliation	12.8	4 Schedule 15.2	CTCT Some estimates were not replaced by revision 14. Forward estimate was incorrectly generated for ICPs 0000010521CEE06 TPW1700198 register 3 (June 2022) and 0000000830CE507 N200045454 register 4 (July and August 2022) and decommissioned ICP 004052459BU0D5 (June 2022). CTCS Some estimates were not replaced by revision 14.	Weak	Low	3	Investigating
Reconciliation participants to prepare information	12.9	2(1)(c) of schedule 12.3	CTCT and CTCS Some submission information was not generated accurately as required by Clause 2 Schedule 15.3 due to data accuracy issues.	Moderate	High	6	Identified
Historical estimates and forward estimates	12.10	3 Schedule 15.3	CTCS Where SASV profiles are not available, consumption based on validated readings is not seasonally adjusted and is labelled as forward estimate. Where an ICP is supplied for one day, historic estimate is not calculated, and forward estimate is reported.	Strong	Low	1	Identified
Forward estimate process	12.12	6 Schedule 15.3	CTCT and CTCS Inaccurate forward estimate caused the thresholds not to be met in some instances.	Moderate	Low	2	Identified
Historical estimate reporting to RM	13.3	10 of Schedule 15.3	CTCT and CTCS Historic estimate thresholds were not met for some revisions.	Moderate	Low	2	Identified
Future Risk Rating					99		
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
CTCT Identification of submission issues outside the 14-month submission window and creation of corrections	2.1	CTCT I recommend using the AC020 audit compliance report to identify backdated status updates (AC020Trader01, AC020Trader02, AC020Trader05) and trader updates (AC020Trader03) backdated more than 260 days which may require further correction to ensure that all consumption is captured within the 14-month submission window and correct submission attributes are applied.	Contact is in the process of developing and testing a new exception management tool (EMT). This tool will encompass a 14-month historical view of existing and new discrepancy reports to ensure data inaccuracies causing incorrect submission and/or non-compliances are captured and corrected at the earliest convenience, and within the 14-month submission window. We are investigating opportunities to utilise the AC020 reports within our EMT to further identify and manage back dated status and trader updates within the Registry which may have an impact on submission accuracy.
CTCS Identification of submission issues outside the 14-month submission window and creation of corrections	2.1	CTCS I recommend using the AC020 audit compliance report to identify backdated status updates (AC020Trader01, AC020Trader02, AC020Trader05) and trader updates (AC020Trader03) backdated more than 260 days which may require further correction to ensure that all consumption is captured within the 14-month submission window and correct submission attributes are applied.	Simply Energy have implemented the monitoring of the audit compliance report for any backdated status updates starting end of February 2024. Our Operations Team keeps the Compliance Team informed of any historical metering or switch read changes.
CTCT Reinstate validation of “active” status dates for new connections	2.9	CTCT Validate “active” status dates for new connections against the meter certification date and initial electrical connection date weekly, using the AC020 audit compliance report sheet AC020Trader21.	Contact already use this report to investigate the validity of new connection active dates. We will explore training more people in this process to ensure it is consistently looked at.
CTCT Notification of gifting	6.1	CTCT Review processes for notification of gifting to provide guidance on when gifting should occur, and how the reconciliation team will be notified so that they can provide the required notice.	A new exception type will be added into the EMT to address instances where I Flow exists on the Registry without corresponding I Device installed in SAP. As instances are identified, the respective teams will investigate and take the necessary corrective actions. We plan to implement a process to review ICPs where notification of gifting is required.
CTCT Meter condition BPEMs	6.6	CTCT Check the logic for creation of meter condition BPEMs, to ensure that they are consistently generated where meter condition events occur. Review the processes for vacant ICPs to determine whether action should be taken for certain types of meter condition events. Review the process for MRS to provide meter condition information where	ICT ticket 156859 has been raised to investigate why a BPEM wasn’t generated from meter condition code. We will review our current processes and explore options for improvement. We engaged with ADR and identified they sent both a no read and meter condition code in error. We have added this to the Operations Meeting agenda to discuss.

Subject	Section	Recommendation	Response
		there is a “no read” and therefore no meter lines are provided in their read file.	
CTCT Validate meter reading frequency reports	6.10	CTCT Investigate why the meter reading frequency report for October 2023 reported one ICP unread each at MXQ0111 and TSS0011 in the last four months, when all ICPs connected appear to have actual readings.	This is being investigated and will be escalated to the SAP team for a deep dive investigation into the script used to create the report.
CTCT Clarify responsibilities and timeframes for investigating non-communicating AMI meters, moving them to NHH reading rounds, and updating the submission type and profile	9.4	CTCT Ensure that there are clear responsibilities and expectations for identifying non-communicating AMI meters, following them up with the MEP, and moving them to a NHH reading route and submission type if the issue cannot be resolved promptly.	We are working through a more structured process of bulk raising jobs with MEPs. This should see more non-comms issues being resolved faster where possible. We are exploring automating the moving of ICPs to a manual meter reading round (if unable to resolve the non-comms issue) to ensure timeliness going forward. New Exception Type to be added in Exception Management Tool to report on AMI Non-Communicating ICP's (AMI Y= N) and HHR profile/submission type. Our Energy Reconciliation team will complete a reconciliation of existing AMI Non-Communicating ICP's and move all ICP's from HHR to NHH Submission type which have been non communication greater than 2 months. Implement process to manage this going forward.
CTCT Clock synchronisation events	9.6	CTCT Develop a process to identify HHR settled ICPs where clock synchronisation errors are more than ± 1800 seconds (one trading period) or NHH settled ICPs where clock synchronisation errors are more than $\pm 86,400$ seconds (one day). Develop a process to correct consumption data when HHR settled ICPs have their clocks adjusted by more than ± 1800 seconds (one trading period). Develop a process to correct consumption data when NHH settled ICPs have their clocks adjusted by more than $\pm 86,400$ seconds (one day).	MEPs send time sync reports to the Field Connections Meter Reading inbox. We will explore creating a process to look at both HHR and NHH settled ICPs where clock adjusted by ± 1800 second and $\pm 86,400$ seconds respectively.
CTCT Meter events	9.6	CTCT Develop a process to identify any event that could have affected the integrity of metering data in the event log and investigate and resolve those events. This could be achieved by Contact directly reviewing the meter events or making arrangements for the MEP to do this on their behalf if agreement can be reached.	We are working with our MEPs to reach an agreement to only deliver the metering events where metering data integrity is impacted.
CTCT SAP settlement unit issues	11.2	CTCT	We will follow-up with our SAP technical team regarding the MyAwhi ticket we

Subject	Section	Recommendation	Response
		Investigate the issues preventing SAP settlement units being updated correctly for unmetered load, reconnections and disconnections and determine a solution.	<p>raised for a review of E_HHE Settlement Units with Manual flags. The review is to identify a potential SAP solution which would significantly change functionality of Settlement Unit Triggers/Change Pointers to automatically update all Settlement Unit Types automatically.</p> <p>Until a more permanent SAP solution has been identified/deployed, our Energy Reconciliation team will complete a one-off exercise to correct all long term ICP's for this exception scenario, as well as implement a new process to manage these going forward.</p>
CTCT Review unexpected default forward estimate for ICPs with readings	12.8	CTCT Determine why default forward estimate was applied for ICPs 0000010521CEE06 TPW1700198 register 3 (June 2022) and 0000000830CE507 N200045454 register 4 (July and August 2022) and decommissioned ICP 004052459BU0D5 (June 2022).	Initial investigation has shown that the cause could be a result of a device change. This will be investigated further.

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

Exemptions 177, 203 and 293 have expired and are no longer required by Contact.

Exemption No. 191 is an 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 will expire at the close of 30 June 2024, or the completion date of a major upgrade to the Ohaaki substation.

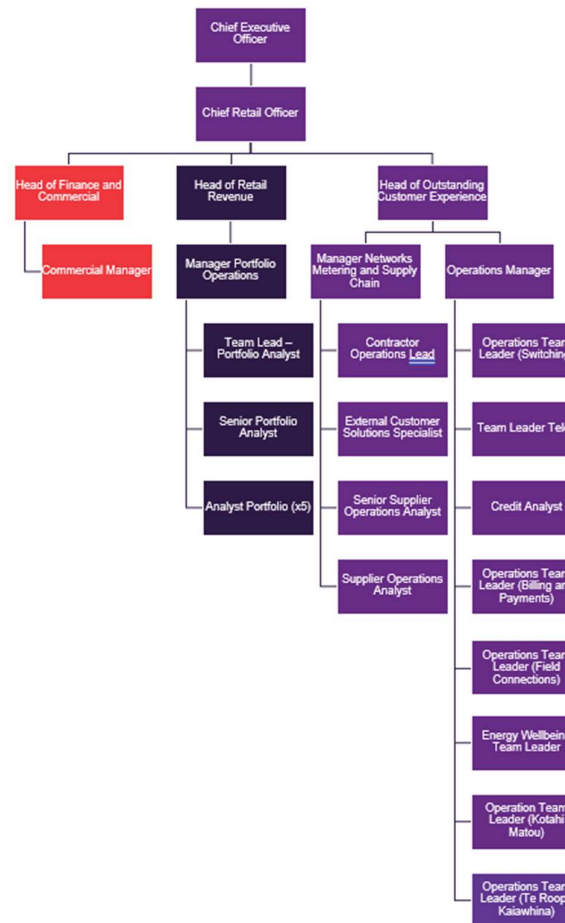
Exemption No. 185: Exemption to clause 11 of schedule 15.3 of the Electricity Industry Participation Code 2010 in respect of creating DUMML databases. This exemption expires on the date on which Contact no longer has responsibility as the trader on the registry, and still applies for ICP 0001183605HB0B0.

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

1.2. Structure of Organisation

Contact provided a copy of their organisational structure.

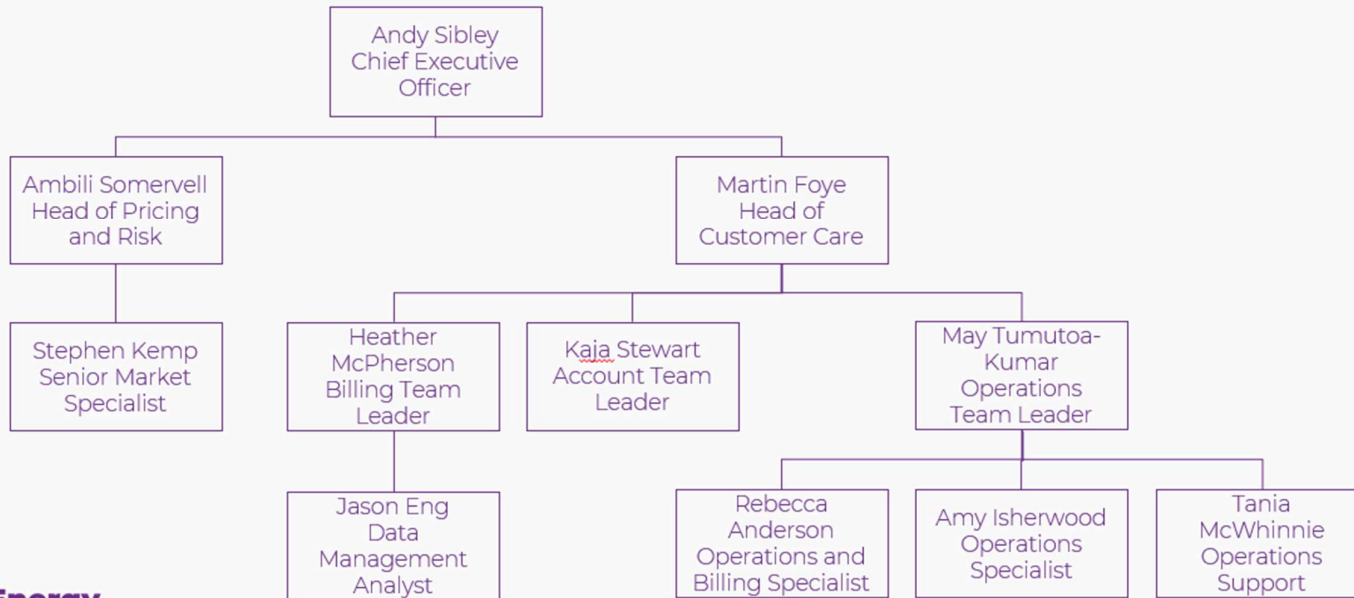
Contact Organisational Diagram



Simply Energy provided a copy of their organisational structure.

Simply Energy Compliance Organization Chart

December 2023



1.3. Persons involved in this audit

Auditors:

Name	Role	Company
Tara Gannon	Lead Auditor	Provera
Brett Piskulic	Auditor	Provera

Contact personnel assisting in this audit were:

Name	Title	Organisation
Aaron Wall	Portfolio Analyst	Contact Energy
Ambili Somervell	Head of Pricing and Risk, Simply Energy	Simply Energy
Amelia Lucie-Smith	Supplier Operations Analyst	Contact Energy
Avtar Singh	Operations Team Leader	Contact Energy
Caitlin Molenaar	Wellbeing Team Member	Contact Energy
Daisy Rose	Billing Payments Team Member	Contact Energy
Dallas Tui	White Label Account Specialist	Simply Energy
Darcey Hewitt	Operations Team Member	Contact Energy
Guannan (Grace) Sun	Billing Team Member	Contact Energy
Hadleigh Townsend	Dispatch Contract Manager	Contact Energy
Hannah Thomson	Operations Team Member	Contact Energy
Heather McPherson	Billing Team Lead	Simply Energy
Ishmita Kaur	Portfolio Analyst	Contact Energy
James Upward	Field Services Team Member	Contact Energy
Jason Eng	Data Management Analyst	Simply Energy
Joanne Benvenuti	Operations Team Member	Contact Energy
Jorgia Bell	Operations Team Member	Contact Energy

Name	Title	Organisation
Kaja Stewart	Support Team Lead	Simply Energy
Kirstey Hooper	Operations Team Member	Contact Energy
Kirstyn Harding	Operations Team Member	Contact Energy
KP Chiew	Senior Reconciliation Analyst	Contact Energy
Liam Minhinnick	Operations Team Member	Contact Energy
Lorraine Bovey	Collections and Assurance Team Leader	Contact Energy
Martin Foye	Operations Manager	Simply Energy
Maryanne Anderson	OSX New Connections Team Leader	Contact Energy
May Tumutoa-Kumar	Operation Team Lead	Simply Energy
Melanie Kleinsmith	Operations Team Member	Contact Energy
Michelle Hoult	Operations Team Member	Contact Energy
Mykaela Catterall	Wellbeing Team Member	Contact Energy
Naghm Anayi	External Customer Solutions Specialist	Contact Energy
Nathan Joyce	Network Operations Analyst External Customer Solutions	Contact Energy
Paul Robson	Operations Team Member	Contact Energy
Rebecca Anderson	Operations Team Member	Simply Energy
Roy Burne	Operations Team Member	Contact Energy
Stephen Kemp	Senior Market Specialist	Simply Energy
Tania McWhinnie	Operations Team Member	Simply Energy
Torana Dower	Operations Team Member	Contact Energy

Agent personnel assisting with this audit were:

Name	Title	Organisation
Andrew Dickie	Data Analyst	EMS
Hannah Kelly	Senior Solution Specialist	EDMI
Lana Burns	C&I Data Services Specialist	Blue Current Assets NZ Limited

1.4. Use of Agents (Clause 15.34)

Code reference

Clause 15.34

Code related audit information

A reconciliation participant who uses an agent

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

Audit observation

Use of agents was discussed with Contact.

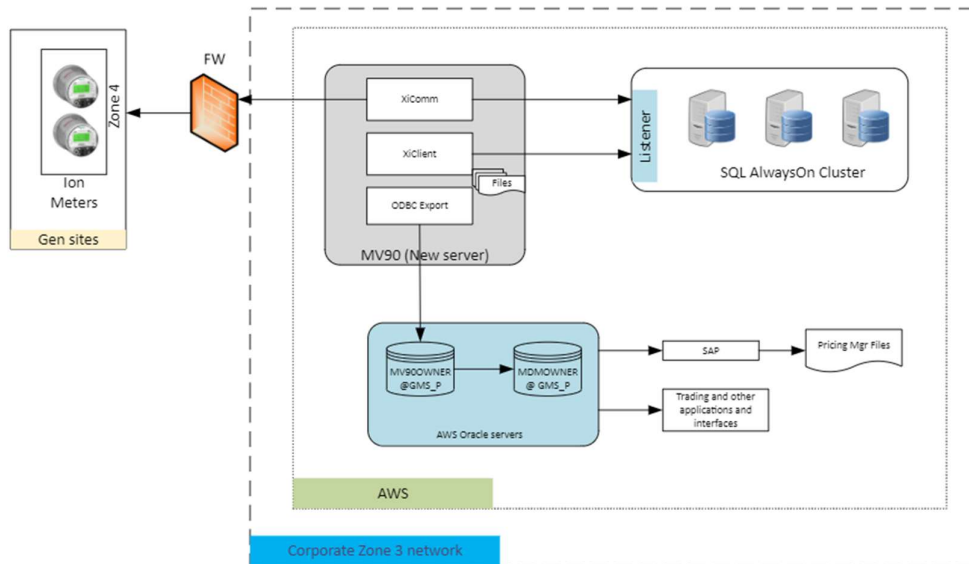
Audit commentary

Contact uses a number of agents as discussed in **section 1.9**.

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.



CTCS

Simply Energy's processes use the following systems:

- **Emersion** records ICP, customer and invoicing information,
- **SalesForce** is used for the management of ICP information, including process workflows and switching,
- **DataHub** is used to manage and validate NHH and HHR meter reading data (validated NHH meter readings are transferred to the EMS **MADRAS** system to generate NHH reconciliation submissions and HHR submissions are generated by Simply Energy from DataHub, and
- Backup is cloud based, and access to systems is restricted using logins and passwords.

Simply Energy have developed a datawarehouse to enable an improved level of exception reporting to be built. The data structures have now been completed and the next phase is to begin populating this datawarehouse with reconciliation data and develop a more comprehensive reporting suite. No material change audit was conducted, because the change is related to improvements relating to identification of exceptions and was not considered to be material.

Agent systems

Agent systems are discussed in their own audit reports.

1.6. Breaches or Breach Allegations

The Authority recorded alleged breach 2307CTCT1 on 18 July 2023 because grid connected generation submission information for new power station Tauhara B (TAB2201) was not provided by the submission deadline in July 2023 under clauses 15.11(a) and 15.18.

At the time of the breach the power station was under construction and had not been commissioned. Two meters had been installed but not certified, and a further five meters were to be installed, and no metering data was being provided to CTCT.

The reconciliation manager was expecting submission data from June 2023 onwards because Transpower had communicated a 20 June 2023 start date for the power station. Contact asked Transpower to update the reconciliation manager and change the date, but they refused. To resolve the issue, CTCT manually produced AV130 NSP volumes files with zero volumes until the power station was operating. There was no market impact.

The breach is being considered by the Authority and no outcome has been determined.

1.7. ICP Data

CTCT

All "active" ICPs are summarised by metering category in the table below. ICPs which are "active" but have no metering details or unmetered load recorded on the registry and are discussed in **section 2.9**.

Metering Category	Dec 2023	Feb 2023	Apr 2022	Aug 2021	Jan 2021	2020
1	429,421	425,871	428,728	409,511	404,012	407,310
2	2375	2,547	2656	2489	2,674	3,956
3	1	1	2	1	182	530

4				-	81	205
5	2	3	3	3	16	22
9	63	68	71	191	97	112
Blank	239	258	278	246	231	329

Status	Dec 2023	Feb 2023	Apr 2022	Aug 2021	Jan 2021	2020
Active (2,0)	432,101	428,748	431,738	412,441	407,293	412,464
Inactive – new connection in progress (1,12)	1	-	2	1	-	-
Inactive – electrically disconnected vacant property (1,4)	7,015	6,775	6,935	6,931	6,978	6,954
Inactive – electrically disconnected remotely by AMI meter (1,7)	3,634	2,953	3,338	2,795	3,045	2,330
Inactive – electrically disconnected at pole fuse (1,8)	132	93	82	61	71	62
Inactive – electrically disconnected due to meter disconnected (1,9)	100	83	78	74	83	81
Inactive – electrically disconnected at meter box fuse (1,10)	45	37	49	40	44	35
Inactive – electrically disconnected at meter box switch (1,11)	1	-	1	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	1,114	1,055	964	925	909	970
Inactive – reconciled elsewhere (1,5)	2	2	2	-	1	3
Decom (3)	56,503	55,430	54,319	53,230	52,440	51,096

CTCX

All “active” CTCX ICPs switched out by 31 October 2022. Only one decommissioned ICP is recorded under this code.

CTCS

All “active” ICPs are summarised by metering category in the table below. ICPs which are “active” but have no metering details or unmetered load recorded on the registry and are discussed in **section 2.9**.

Metering Category	Dec 2023	Feb 2023	Apr 2022	Aug 2021	Jan 2021	2020
1	2,671	3,997	3,441	4,857	4,414	41
2	979	962	866	1,125	1,033	24
3	424	407	391	430	380	38
4	153	164	152	154	129	7
5	28	34	31	16	5	-
9	30	35	55	64	45	3
Blank	48	42	64	75	77	-

Status	Dec 2023	Feb 2023	Apr 2022	Aug 2021	Jan 2021	2020
Active (2,0)	4,333	5,641	5,000	6,721	6,083	113
Inactive – new connection in progress (1,12)	7	20	13	14	3	-
Inactive – electrically disconnected vacant property (1,4)	35	34	2	2	1	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	24	25	2	6	2	-
Inactive – electrically disconnected at pole fuse (1,8)	9	9	-	1	2	-
Inactive – electrically disconnected due to meter disconnected (1,9)	8	3	-	-	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	2	1	-	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	2	1	-	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	10	7	6	3	1	-
Inactive – reconciled elsewhere (1,5)	5	5	5	6	3	-
Decommissioned (3)	176	127	76	33	5	-

1.8. Authorisation Received

Contact provided a letter of authorisation.

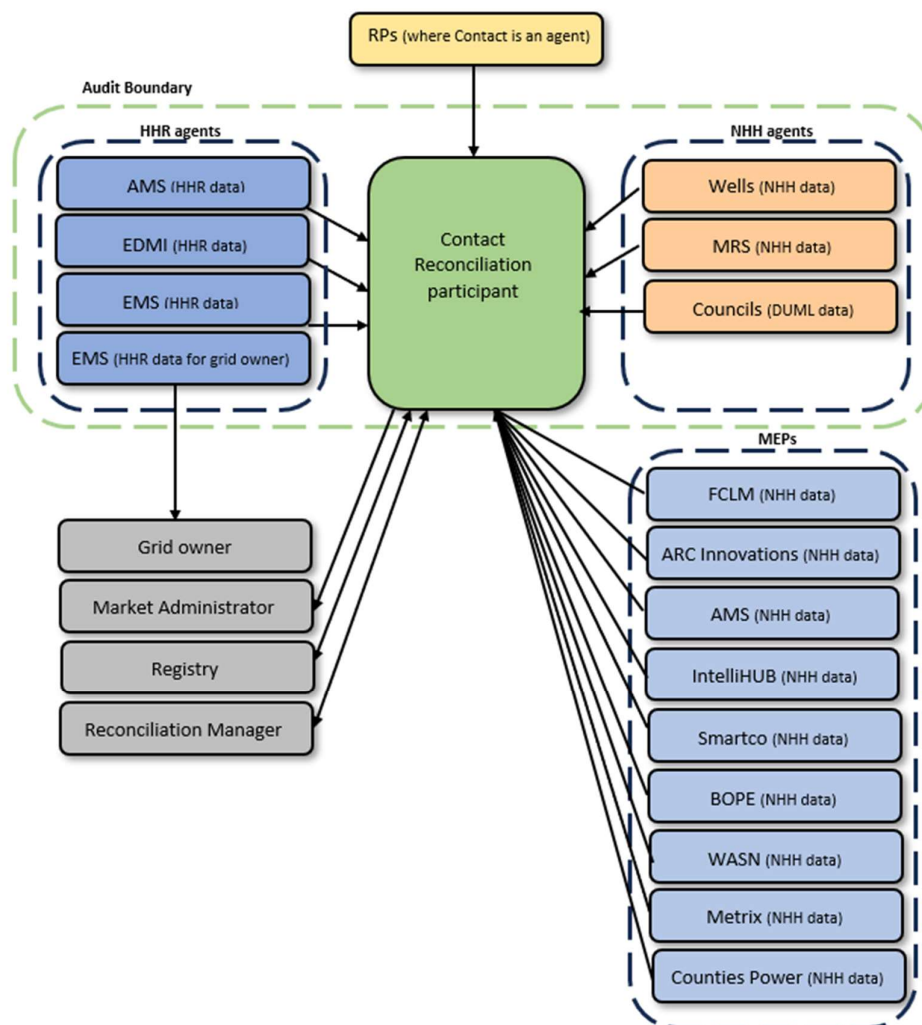
1.9. Scope of Audit

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 on site and remotely using Microsoft Teams between 30 January and 19 February 2024.

The audit analysis was based on:

- a registry list, event detail report and audit compliance report for 1 April 2023 to 7 December 2023 and a registry list snapshot for 7 December 2023 for CTCT,
- a registry list, event detail reports and audit compliance reports for 1 April 2023 to 12 December 2023 and a registry list snapshot for 12 December 2023 for CTCS, and
- a registry list for 1 April 2023 to 12 December 2023 for CTCX.

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



The table below shows the tasks under clause 15.38 of part 15, for which Contact requires certification for the CTCT 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 Providing Data to Contact
(a) - Maintaining registry information and performing customer and embedded generator switching		
(b) – Gathering and storing raw meter data	AD Riley (MRS) – NHH Blue Current Assets NZ Limited – HHR EDMI – HHR EMS – HHR	Blue Current Assets NZ Limited (NGCM, SMCO) ARC Innovations (ARCS) Influx (FCLM) IntelliHUB (IHUB) -incl. Metrix (MTRX), BOPE and Counties Power (COUP) WEL Networks (WASN)
(c)(iii) - Creation and management of volume information	Blue Current Assets NZ Limited – HHR EDMI – HHR EMS – HHR Various Councils – DUML databases	
(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	

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

CTCX

All “active” CTCX ICPs switched out by 31 October 2022. Only one decommissioned ICP is recorded under this code.

CTCS

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

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 Blue Current Assets NZ Limited – HHR EDMI – HHR	Blue Current Assets NZ Limited (NGCM, SMCO) Arc Innovations (ARCS) IntelliHUB (IHUB) -incl. Metrix (MTRX) and Counties Power (COUP) Influx (FCLM)
(c)(i) - Creation and management of HHR volume information	Simply Energy Various Councils – DUMML databases	
(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 summary 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. The EMS NHH processes are not included in their agent audit and were reviewed as part of this audit. The MRS, Wells, Blue Current Assets NZ Limited (formerly AMS), EMS and EDMI reports will be submitted with this report. Any non-compliances affecting Contact are recorded in this report.

1.10. Summary of previous audit

Contact provided a copy of their previous reconciliation participant audit report conducted in June 2023 by Tara Gannon (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	10.6, 11.2, 15.2	<p>CTCT Some inaccurate data is recorded and was not updated as soon as practicable. Some previous audit corrections not carried out.</p> <p>CTCS Some inaccurate data is recorded and was not updated as soon as practicable. Some previous audit corrections not carried out.</p>	Still existing
Electrical connection of a point of connection	2.11	10.33A	<p>CTCT 104 new ICPs did not have their meters certified within five business days of initial electrical connection. 244 reconnection ICPs did not have their meters certified within five business days of reconnection. Metering for three ICPs was not recertified on un-bridging.</p> <p>CTCS One new ICP did not have its meter certified within five business days of initial electrical connection.</p>	Still existing
Arrangements for line function services	2.12	11.16	<p>CTCS CTCS traded on ICPs connected to the CIAL, SMAL and TIKL networks where there was no arrangement or agreement in place.</p>	Still existing but previous non-compliances are cleared
Arrangements for metering equipment provision	2.13	10.36	<p>CTCT No arrangement in place for the maintenance of BOPE metering.</p>	Cleared
Meter bridging	2.17	10.33C and 2A of Schedule 15.2	<p>CTCT Two ICPs from a sample of 21 where the MEP was notified of a bridged meter later than one business day from when Contact was notified. Volume corrections not applied for 48 bridged ICPs that have subsequently switched away. Volume corrections not applied or applied incorrectly for five bridged ICPs from a sample of nine ICPs.</p>	Still existing
Changes to Registry	3.3	10 Schedule 11.1	<p>CTCT 1,718 late updates to “active” status. 721 late updates to “inactive” status. 2,544 late trader updates. 186 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP.</p> <p>CTCS Eight late updates to “active” status.</p>	Still existing

Subject	Section	Clause	Non-compliance	Status
			<p>20 late updates to “inactive” status.</p> <p>127 late trader updates.</p> <p>One ANZSIC code update was made more than 20 business days after CTCS began trading at the ICP.</p>	
Trader responsibility for an ICP	3.4	11.18	<p>CTCT</p> <p>ICP 0000514338CE7AF did not have an accepted MEP nomination within 14 business days of initial electrical connection.</p>	Still existing
Provision of information to the registry	3.5	9 Schedule 11.1	<p>CTCT</p> <p>503 late updates to “active” status and MEP nominations for new connections.</p> <p>ICP 0000062294NT59C was connected on 13 February 2023 and the meter has recorded consumption since 14 February 2023. The ICP has not been claimed and moved to “active” status by CTCT because it is a TOU meter and expected to be supplied under CTCS.</p> <p>13 of a sample of 49 ICPs checked had incorrect “active” status dates, and one was corrected during the audit.</p> <p>186 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP.</p> <p>CTCS</p> <p>18 late updates to “active” status for new connections.</p> <p>One ICP had an “inactive” active status date recorded and was corrected during the audit.</p> <p>One ANZSIC code update was made more than 20 business days after CTCS began trading at the ICP.</p> <p>Four late MEP nominations for new connections.</p>	Still existing
ANZSIC codes	3.6	9 (1(k) of Schedule 11.1	<p>CTCT</p> <p>Six (6%) of the 100 ICPs sampled had an incorrect ANZSIC code applied and were corrected during the audit.</p> <p>CTCS</p> <p>Three (10%) of the 30 ICPs sampled had an incorrect ANZSIC code applied and were corrected during the audit.</p>	Still existing for CTCT Cleared for CTCS
Changes to unmetered load	3.7	9(1)(f) of Schedule 11.1	<p>CTCT</p> <p>ICP 0000040854NT2F4 had incorrect daily unmetered kWh recorded and was updated on the registry and in SAP during the audit. Due to a calculation error the load was recorded as 0.62 kWh per day instead of 6.187 kWh per day.</p> <p>ICP 0000254425HB5DE had incorrect daily kWh recorded and has been corrected in SAP but not on the registry. Ballast was not included in the original calculation of 1.32 kWh per day which has now been corrected to 1.51 kWh per day.</p> <p>ICP 0000018605WEC0F had incorrect daily kWh recorded and is to be corrected in SAP and on the registry. The original calculation of 0.302 did not include the full wattage that CTCT and the distributor believe is connected to the ICP (0.529 kWh per day for 184W connected 11.5 hours per day across four ICPs).</p> <p>ICP 0000553257NR3D0 is recorded with 1.2 kWh daily unmetered kWh and 0.00;0.00;SecurityGate. It is expected</p>	Still existing But some of the ICP discrepancies have been resolved.

Subject	Section	Clause	Non-compliance	Status
			<p>to be recorded with 0.02 kWh per day and 0.2kW;0.10;SecurityGate.</p> <p>ICP 0007680774HB8DE's trader update for 1 November 2014 on 14 September 2022 contained an incorrect daily unmetered kWh. Daily unmetered kWh should be 2.989 but was updated to 3.000 in error.</p> <p>ICP 0000513944CEF86 is an unmetered weather station which switched in on 1 January 2023. CTCT has investigated the load with the network and customer who have confirmed that the ICP was livened with 480W connected 24 hours, equivalent to 11.52 kWh per day or 4,205 kWh per annum. The network has updated their unmetered load details on the registry, and CTCT intends to update their trader unmetered load details in SAP and the registry and provide revised submission data.</p>	
Management of "active" status	3.8	17 Schedule 11.1	<p>CTCT</p> <p>ICP 0395721083LCCAF was reconnected during the previous trader's period of supply because the correct reconnection date was not provided to the MEP when requesting the reconnection.</p> <p>Three reconnections had incorrect status event dates which were corrected during the audit.</p> <p>One reconnection was processed for the wrong ICP and was corrected during the audit.</p> <p>13 of a sample of 49 new ICPs checked had incorrect "active" status dates, and one was corrected during the audit.</p> <p>CTCS</p> <p>One new ICP had an incorrect "active" status date recorded and was corrected during the audit.</p>	Still existing for CTCT Cleared for CTCS
Management of Inactive status	3.9	19 of schedule 11.1	<p>CTCT</p> <p>ICP 0007118113RN739 inactive consumption was confirmed as being genuine however this has not been resolved so this volume (5,082 kWh) is missing from the submission process.</p> <p>66 ICPs the inactive consumption was confirmed as being genuine however corrupt settlement unit assignments are preventing these ICPs from being included in submission totalling 29,112 kWh.</p> <p>CTCS</p> <p>One inactive status update had an incorrect status reason applied and was corrected prior to the audit.</p> <p>One inactive status update had an incorrect event date applied and was corrected during the audit.</p>	Still existing
Losing trader must provide final information	4.3	5 Schedule 11.3	<p>CTCT</p> <p>Three CS breaches.</p> <p>Three E2 breaches.</p> <p>Four CS files had an average daily kWh of zero incorrectly recorded which was created prior to a system fix to ensure average daily kWh was correctly calculated.</p>	Still existing
Retailers must use the same reading	4.4	6(1) and 6A Schedule 11.3	<p>CTCT</p> <p>Four RR breaches.</p>	Still existing

Subject	Section	Clause	Non-compliance	Status
Gaining trader informs registry of switch request	4.7	9 of Schedule 11.3	<p>CTCT Three of a sample of 15 switch move ICPs should technically have been requested as transfer switches. Switch move was applied to ensure the correct event date was used.</p> <p>CTCS Two of the sample of ten switch move ICPs should technically have been requested as transfer switches. Switch move was applied to ensure the correct event date was used.</p>	Cleared
Losing trader provides information - switch move	4.8	10(1) Schedule 11.3	<p>CTCT Two ET breaches. The switches were later withdrawn so the incorrect dates had no impact.</p> <p>CTCS One AN contained an incorrect proposed event date. The switch was later withdrawn so the incorrect date had no impact.</p>	Still existing
Losing trader must provide final information	4.10	11 Schedule 11.3	<p>CTCT One CS had an average daily kWh of zero incorrectly recorded in a CS file which was created prior to a system fix to ensure average daily kWh was correctly calculated. Two switch move CS files had an incorrect last actual read date.</p> <p>CTCX One switch move CS file had an incorrect last actual read date. Two switch move CS files had incorrect average daily kWh.</p> <p>CTCS Three switch move CS files had incorrect last actual read dates. Three switch move CS files had their switch event read type recorded as estimated, but should have been actual. One switch move CS file had incorrect average daily kWh.</p>	Still existing
Gaining trader changes to switch meter reading	4.11	12 of Schedule 11.3	<p>CTCT 24 late RR breaches for switch moves.</p> <p>CTCS Two RR breaches for switch moves.</p>	Still existing for CTCT Cleared for CTCS
Withdrawal of switch requests	4.15	17 and 18 Schedule 11.3	<p>CTCT 34 SR breaches. 133 NA breaches. Six AW breaches. Seven of a sample of 21 NWs did not have the code with the best fit applied. NW-1097618 for ICP 0007707965TUFF0 was sent in error due to a misunderstanding, the staff member should have issued an RR instead. One incoming NW was rejected in error and was accepted on reissue.</p> <p>CTCS One NW was issued in error and rejected by the other trader because the wrong ICP was selected.</p>	Still existing for CTCT Cleared for CTCS

Subject	Section	Clause	Non-compliance	Status
			Three NA breaches.	
Maintaining shared unmetered load	5.1	11.4	CTCT 0000018605WECOF had incorrect daily kWh recorded and is to be corrected in SAP and on the registry. The original calculation of 0.302 did not include the full wattage that CTCT and the distributor believe is connected to the ICP (0.529 kWh per day for 184W connected 11.5 hours per day across four ICPs).	Still existing
Distributed unmetered load	5.4	11 of schedule 15.3	CTCT and CTCS 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 six of the databases managed.	Still existing for CTCT Cleared for CTCS
Electricity conveyed & notification by embedded generators	6.1	10.13	CTCT ICP 0000048742HR7FB has RPS PV1 profile recorded, but no generation is present, and it should have RPS profile recorded on the registry. The correct profile is applied for submission. Two other ICPs had profiles indicating generation recorded on the registry when no generation was present and were corrected during the audit. Distributed generation ICPs 0419595066LC60F and 0000158421UN9EF do not have generation metering installed and have not been added to the gifting register. The metering for ICP 1001157629CK617 is not fit for purpose. While meters were bridged, energy was not metered and quantified according to the code for 206 ICPs. CTCS Notice of gifting of generation for HHR ICPs 0005093997HBEBB and 0006804209RN6C3 was provided to the RM on 8 May 2023. Both ICPs have been supplied since 1 April 2022 but were not identified earlier because there was no specific check for generation metering for HHR ICPs.	Still existing for CTCT Cleared for CTCS
Responsibility for metering at GIP	6.2	10.26 (6), (7) and (8))	CTCT The certification date for WHI2201CTCTG was not updated within 10 business days of the NSP being certified.	Cleared
Derivation of meter readings	6.6	3(1), 3(2) and 5 Schedule 15.2	CTCT Meter condition information is not consistently investigated to identify issues with seals, tampering, phase failure or safety.	Still existing
NHH meter reading application	6.7	6 Schedule 15.2	CTCT For two ICPs no actual meter read, or permanent estimate read was applied for the profile code event date.	Cleared for CTCT
Interrogate meters once	6.8	7(1) and (2) Schedule 15.	CTCT For three ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met.	Still existing for CTCT Cleared for CTCS

Subject	Section	Clause	Non-compliance	Status
			<p>The meter read compliance process begins after 130 days with no readings so it is unlikely compliance will be achieved where the period of supply is less than this.</p> <p>CTCS</p> <p>For at least eight ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>The meter read compliance process begins after three months with no readings so it is unlikely compliance will be achieved where the period of supply is less than 90 days.</p>	
NHH meters interrogated annually	6.9	8(1) and (2) Schedule 15.2.	<p>CTCS</p> <p>For eight of a sample of 20 ICPs unread in the 12 months ending 31 March 2022, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p>	Still existing
NHH meters 90% read rate	6.10	9(1) and (2) Schedule 15.2	<p>CTCT</p> <p>For one ICP unread in the four months ending 31 March 2022, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>CTCS</p> <p>For five ICPs unread in the four months ending 31 March 2022, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p>	Still existing
Identification of readings	9.1	3(3) Schedule 15.2	<p>CTCS</p> <p>Three switch move ICPs had incorrectly labelled switch event meter readings.</p>	Still existing
Meter data used to derive volume information	9.3	3(5) of schedule 15.2	<p>CTCT</p> <p>Raw meter data is truncated upon upload into SAP meter read table and not when volume information is created.</p>	Still existing
Electronic meter readings	9.4	15 Schedule 15.2 2	<p>CTCT</p> <p>Reasonable endeavours not met for a sample of six “active” long term non-communicating AMI metered ICPs where estimations are provided for more than 1,000 days and the estimates are not aligned with received meter reads from manual meter reading.</p> <p>Interval data consumption not correctly estimated for AMI meter changes to ensure the interval data matches the consumption calculated between meter reads.</p>	Cleared for CTCT
Electronic meter readings	9.6	17(4)(f)&(g) of schedule 15.2	<p>CTCT</p> <p>Full AMI meter event logs provided by MEPs are not routinely reviewed.</p> <p>78 (ARC AMI MEP) HHR submitted ICPs where the time correction exceeded 1,900 seconds and this time correction was then reverted at the next interrogation and no review of the raw meter data was conducted to determine if any corrections were required.</p> <p>Volume correction not applied for ICP 0110003151EL984 due to a phase failure.</p> <p>HHR AMI data incorrectly replaced by estimates due to inaccurate midnight reads used for sum-check validation.</p>	Still existing ICP 0110003151EL984 was confirmed not to require a correction.

Subject	Section	Clause	Non-compliance	Status
			<p>A sample of six ICPs from a population of 984 where the submission type was HHR and where the MEPs maximum interrogation cycle expired. In all cases the ICPs remain "active" on the registry and continued to be flagged for HHR submission.</p> <p>CTCS Full AMI meter event logs provided by MEPs are not routinely reviewed.</p>	
Calculation of ICP days	11.2	15.6	<p>CTCT 20 revision differences were caused by inaccurate ICP days submission data because incorrect settlement unit information was recorded in SAP. The errors were corrected by the time that the audit was complete.</p>	Still existing
HHR aggregates information provision to the reconciliation manager	11.4	15.8	<p>CTCT Four ICPs had changes to the NSP assignment on the registry where SAP had not reflected this change. 17 ICPs were where the ICP had transitioned to NHH submission type on the registry however the settlement unit assignment in SAP remained HHR.</p>	Still existing
Creation of submission information	12.2	15.4	<p>CTCT 102 ICPs where the unmetered load settlement unit assignment was missing resulting in an under submission of 36,658 kWh per annum. 235 ICPs where the unmetered load settlement unit assignment was not end dated on the removal of the unmetered load resulting in an over submission of 45,460 kWh per annum. Some ICPs were missing from submissions due to data inaccuracies. Some corrections identified in the previous audit were not corrected and are now outside the revision cycle. Volume corrections were not applied for 48 bridged ICPs that have subsequently switched away. Volume corrections were not applied or applied incorrectly for four bridged ICPs from a sample of nine ICPs. ICP 0007118113RN739 inactive consumption was confirmed as being genuine however this volume (5,082 kWh) is missing from the submission process. 66 ICPs the inactive consumption was confirmed as being genuine however corrupt settlement unit assignments are preventing these ICPs from being included in submission totalling 29,112 kWh.</p>	Still existing
Accuracy of submission information	12.7	15.12	<p>CTCT Some submission data was inaccurate and was not corrected at the next available opportunity.</p>	Still existing
Permanence of meter readings for reconciliation	12.8	4 Schedule 15.2	<p>CTCT Some estimates were not replaced by revision 14. Consumption volume for ICP 0000202101CTC81 incorrectly labelled as forward estimate.</p> <p>CTCS Some estimates were not replaced by revision 14.</p>	Still existing

Subject	Section	Clause	Non-compliance	Status
Reconciliation participants to prepare information	12.9	2(1)(c) of schedule 12.3	<p>CTCT</p> <p>Four ICPs had changes to the NSP assignment on the registry where SAP had not reflected this change.</p> <p>102 ICPs where the unmetered load settlement unit assignment was missing resulting in an under submission of 36,658 kWh per annum.</p> <p>235 ICPs where the unmetered load settlement unit assignment was not end dated on the removal of the unmetered load resulting in an over submission of 45,460 kWh per annum.</p> <p>66 ICPs where the inactive consumption was confirmed as being genuine however corrupt settlement unit assignments are preventing these ICPs from being included in submission totalling 29,112 kWh.</p>	Still existing
Historical estimates and forward estimates	12.10	3 Schedule 15.3	<p>CTCS</p> <p>Where SASV profiles are not available, consumption based on validated readings is not seasonally adjusted and is labelled as forward estimate.</p>	Still existing
Forward estimate process	12.12	6 Schedule 15.3	<p>CTCT CTX CTCS</p> <p>Inaccurate forward estimate caused the thresholds not to be met in some instances.</p>	Still existing
Compulsory meter reading after profile change	12.13	7 Schedule 15.3	<p>CTCT</p> <p>ICPs 0000005122DEF1D and 0000024655DE0E5 did not have an actual meter read present for the profile change.</p>	Cleared
Historical estimate reporting to RM	13.3	10 of Schedule 15.3	<p>CTCT and CTCS</p> <p>Historic estimate thresholds were not met for some revisions.</p>	Still existing

Subject	Section	Recommendation	Status
Validation of inputs to the submission process	2.1	<p>CTCT</p> <p>I recommend confirming processes and responsibilities to ensure that inputs into the reconciliation process are correct, and missing and incorrect information is resolved at the first opportunity. Team members responsible for managing the data should be aware of the impact incorrect information has on reconciliation submissions, and the process steps required to resolve issues completely.</p> <p>As a minimum management of the following data should be considered:</p> <ul style="list-style-type: none"> • aggregation factors including network, NSP, dedicated NSP, loss factor (and pricing category which is linked to this), profile, submission type, and flow direction, • ICP metering and unmetered load, including ensuring that SAP's unmetered load settlement units are correct and that meters have the correct status and details recorded on switch in, replacement and new connection, • management of ICP status including ensuring that SAP's settlement units are accurate and consistent with the registry, and that inactive consumption is identified, investigated and reported as required, and 	Adopted.

Subject	Section	Recommendation	Status
		<ul style="list-style-type: none"> identification and correction of meter defects including bridged meters. 	
Bridged meter process	2.17	<p>CTCT</p> <p>Enhance the current processes to:</p> <ul style="list-style-type: none"> review the correction for accuracy and ensure that the volumes are correctly applied for submission based on the submission type for the affected ICP, and provide end to end monitoring to ensure that bridged meters are unbridged, and corrections are processed. 	Adopted.
Process the new connection for ICP 0000062294NT59C. Review the new connection process and add controls to prevent HHR new connections being accepted.	3.5	<p>CTCT</p> <p>Arrange for the distributor to change the proposed trader for ICP 0000062294NT59C to CTCS, so that CTCS can claim the ICP, move it to “active” status and provide submission data.</p> <p>Review the new connection process and add controls to prevent HHR new connections being accepted.</p>	Adopted. ICP 0000062294NT59C is now claimed by CTCS from “active” date of 13 February 2023. No HHR new connections were identified this audit period.
BPEMs for changes to distributor unmetered load	3.7	<p>CTCT</p> <p>Create a new BPEM to identify removal of unmetered loads.</p>	Not adopted. Removal of unmetered load is identified through other validation processes.
Ensure consistency of unmetered load operational hours.	3.7	<p>CTCS</p> <p>Confirm with each distributor the annual operational hours of unmetered streetlights so that consistent daily operation hours can be confirmed and applied.</p>	Adopted.
Field service orders returned as “could not complete” which are closed by the robot	3.8	<p>CTCT</p> <p>Develop a process to identify any jobs which were returned as not completed which have been closed by the robots, so that they can be reissued if necessary.</p>	Adopted using keyword searches of ORB jobs.
Training on application of the DF NW response code	4.15	<p>CTCT</p> <p>Provide refresher training to staff on the correct use of the DF NW response code.</p> <p>DF is expected to be used where the requested transfer date greater than 10 business days in the future only. Other date errors should have the CE (customer error) response code applied.</p>	Adopted, and some further refresher training will be provided to the Kotahi Matou team who sometimes applied the DF code invalidly during the audit period.
Notification of gifting	6.1	<p>CTCT</p> <p>Review processes for notification of gifting to provide guidance on when gifting should occur, and how the reconciliation team will be notified so that they can provide the required notice.</p>	In progress, a new process is being developed.
Review of MRSL meter condition information	6.6	<p>CTCT</p> <p>Add agenda item to MRSL meter reading operation meeting to review frequency of phase failure being identified by meter readers compared to AMI providers via meter event logs. Where power quality incidents cause phase failure within a region both AMI and non-AMI metering data providers should identify a similar number of phase failures per capita.</p>	Adopted.
Develop standard process to ensure the best endeavours	6.8	<p>CTCS</p> <p>I recommend developing a standard process for support team/business specialists to follow to ensure that the requirement</p>	Adopted.

Subject	Section	Recommendation	Status
requirements for read attainment are met		to make at least three attempts to contact the customer using two different communication methods are met where the issue cannot be resolved promptly.	
Replacement of data	9.4	CTCS If partial replacement data is provided, ensure that only the periods with valid replacement data are updated in DataHub.	In progress, a solution is being developed.
Review automated implausible read process to include step to review photos obtained by meter reader	9.5	CTCT CTCT to review its automated implausible read process to include a manual step where the outcome of the validation is to request a control (out of cycle) meter reading, to include a pause in the process to allow a user to check for a photo on the AD Riley portal prior to releasing the control (out of cycle) meter reading request.	Adopted. Reads from the MRS portal are attached to BPEMs.
Implement process to review the billed dollar value outside of tolerance validation thresholds as part of any price change	9.5	CTCT Implement process to review the billed dollar value outside of tolerance validation thresholds as part of any price change to reduce the number of false positive exceptions being triggered due to incremental changes in price and not some other reason requiring investigation.	Not adopted. CTCT confirmed that pricing changes are unlikely to result in large numbers of changes between billed consumption bands.
Zero consumption reporting	9.5	CTCS Establish a validation process for meters with zero consumption.	Adopted.
Clock synchronisation events	9.6	CTCT Where a clock synchronisation over 1800 seconds occurs, and data for multiple trading periods is pushed into the period of adjustment, develop a process to spread the total consumption for the adjustment period across the periods it actually occurred within.	Not adopted and re-raised.
Develop process to peer review all service orders relating to faulty meters	9.6	CTCT I recommend CTCT develops a process to peer review all service orders relating to meter faults to ensure that where a data or volume correction is also required, that this is undertaken consistently.	Not adopted. Keyword searches of ORB jobs are used to identify meter faults where volume corrections may be required.
Review consumption difference thresholds between revisions for the same consumption period	9.6	CTCS I recommend a review of the consumption threshold is undertaken to better align the internal validation of revisions of HHR submission data for the same consumption period to the current $\pm 10\%$ Authority determined tolerance.	Adopted, the thresholds have been reduced.
Identification and escalation of missing AMI interval data to MEPs.	9.6	CTCS Develop and implement reporting of missing/estimated interval data used in submission and the process to escalate these instances to the relevant AMI MEP for resolution.	In progress, a report to identify excessive estimates will be moved into production so that missing data can be followed up with the MEP.
SAP settlement unit issues	11.2	CTCT Investigate the issues preventing SAP settlement units being updated correctly for unmetered load, reconnections and disconnections and determine a solution.	In progress, investigation is underway, and the recommendation has been repeated for visibility.

Subject	Section	Recommendation	Status
Ensure that the DUML register contains all CTCS DUML ICPs	12.2	<p>CTCS</p> <p>Capture of “reconciled elsewhere” DUML ICPs in the Authority’s list of approved distributed unmetered load databases.</p>	<p>Adopted. These ICPs are now added to the Authority's list. Internal reporting has also been created to assist in any switching of the “active” ICPs.</p>

2. OPERATIONAL INFRASTRUCTURE

No activity occurred for CTCX during the audit period.

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

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

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

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

Audit observation

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

The registry list and ACO20 audit compliance reports 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

Field services jobs are managed using ORB. Returned work completion paperwork is received in ORB and workflows transfer the updates to SAP (matching them to an open order), and then from SAP to the registry. The ORB work type and completion status is used to determine the correct ICP attributes in SAP.

Trader updates are made by updating SAP which then updates the registry, or updating the registry directly and the update will be imported into SAP with other registry updates.

Registry acknowledgement files are imported into SAP overnight and BPEMs are generated where a negative response code is received. The BPEMs are reviewed daily, and corrections are processed as necessary.

SAP data is validated using a suite of reports in databricks and SAS which are run monthly by the Network Operations Analyst External Customer Solutions. These checks focus on the current ICP attributes. The Network Operations Analyst External Customer Solutions usually completes an initial analysis on the exception reports, logically grouping exceptions of similar types and identifying actions required before passing the exceptions to individual operations teams for them to action. I confirmed that many of the exceptions found during this audit had been identified through these reports but had not consistently been investigated and resolved.

In addition, a new exception management tool (EMT) is being developed and tested. This allows exceptions relating to historic records to be identified so that they can be corrected and revised data provided through the submission revision process.

Validation area	Validations
Status mismatch	Electricity connections mismatch (databricks - monthly) identifies current status discrepancies between the registry and SAP.
New connections	New connection breach report (databricks - daily) is emailed to the Network Operations Analyst External Customer Solutions each day. Databricks combines a registry list of ICPs at “new” and “ready” status with CTCT as the proposed trader, with registry ICP information including the initial electrical connection date, ORB service order information, and SAP customer contract information. The report is shared with the operations and switching teams so that ICPs which require claiming on the registry and status changes, can be investigated and have their status updated if necessary.
Trader mismatch	Supply scen mismatch (databricks - monthly) identifies current trader discrepancies between the registry and SAP.
Missing events in SAP	Elec events mismatch (databricks - monthly) identifies event audit numbers recorded in the registry but not SAP. Address, metering, network, pricing, status and trader events are checked.
ANZSIC code mismatch	ANZSIC code mismatches (SAS - monthly) identifies ICPs where either the registry and SAP ANZSIC codes are inconsistent, or the billing class is inconsistent with the ANZSIC code. T99 ANZSIC code (databricks - monthly) identifies ICPs with T99 codes.
Unmetered load	Unmetered reporting 1 (databricks - monthly) identifies ICPs with SAP unmetered load details and no distributor unmetered load details. Unmetered reporting 2 (databricks - monthly) identifies ICPs where the unmetered flag is no and no meter is present, which are checked against MEP nominations to determine whether a meter installation is underway before any remaining exceptions are followed up. Most commonly this occurs where the MEP has not responded to an MEP nomination or has accepted the nomination but not updated their metering details on the registry.
Distributed generation	Profiles DG installation (databricks - monthly) identifies all ICPs with distributed generation. The report shows installation type discrepancies between SAP and the registry, and instances where the profile is inconsistent with the installation type. Where a job for import/export metering has been raised, no action is taken and where no job has been raised, the exception is passed to the distributed generation team to arrange meter installation (there are sometimes delays in jobs for meter installation being raised and/or completed). Any ICPs with start dates within the previous month are carefully checked to ensure that their profile and metering details are correct. Contact occasionally runs the fuel type profile check (databricks) which is filtered on fuel type to ensure that the profile and fuel type are consistent.
NSP mismatch	Network grid mismatch (databricks - monthly) identifies current NSP mismatches between the registry and SAP.
Profiles	Profiles (databricks - weekly) identifies current profile mismatches between the registry and SAP. The new exception management tool helps to identify other profile discrepancies.
MEP nominations	Check NCGS nomination (databricks- weekly) identifies MEP nominations for NGCS so that they can be corrected to NGCM.

Analysis of the AC020 audit compliance report and registry list found:

Issue	Dec 2023 Qty	Feb 2023 Qty	Apr 2022 Qty	Aug 2021 Qty	Jan 2021 Qty	Comments
ICP at status "new connection in progress" (1,12)	1	0	2	1	0	Compliant.
Active date variance with Initial Electrical Connection Date and/or meter certification date	753	1,080	657	1,001	630	I checked a diverse sample of 43 ICPs and found four had incorrect "active" status dates. See section 3.5 .
Active ICPs with metering category three or higher with NHH submission flag	0	0	1	0	0	Compliant.
Active ICPs with blank ANZSIC codes	0	0	0	0	0	Compliant.
Active ICPs with ANZSIC "T994" or "T994000" don't know	3	5	2	3	43	See section 3.6 .
Active ICPs with ANZSIC "T997" "response unidentifiable"	0	0	0	0	0	Compliant.
Active ICPs with ANZSIC "T998" "response outside of scope"	0	0	0	0	0	Compliant.
Active ICPs with ANZSIC "T99", "T999" or "T999999" not stated	0	0	0	0	4	Compliant.
Active ICPs with metering category three or above with a residential ANZSIC code	0	0	0	0	0	Compliant.
Active ICP with no MEP and unmetered flag set to N	98	100	141	23	58	55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the registry after the report was run. See sections 2.9 and 3.4 .
Active ICP with meter category nine or blank and unmetered flag set to N	98	101	150	196	58	55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the

Issue	Dec 2023 Qty	Feb 2023 Qty	Apr 2022 Qty	Aug 2021 Qty	Jan 2021 Qty	Comments
						registry after the report was run. See sections 2.9 and 3.4.
ICPs with Distributor unmetered load populated but retail unmetered load is blank or 0	8	0	6	8	3	See section 3.7.
ICPs with unmetered load flag Y but load is recorded as zero, excluding SB ICPs	1	1	0	2	0	See section 3.7.
ICP with incorrect standard unmetered load	10	4	16	20	18	Excluding the ICP below with incorrect shared unmetered load. See section 3.7.
ICPs with incorrect shared unmetered load	1	1	6	0	0	See section 5.1.
Submission against the RPS profile where the registry has a controlled profile.	575	723	246	240	214	575 ICPs with profiles requiring a certified control device recorded on the registry had expired HHR certification or NHH non-AMI metering with no control device certification. RPS profile was correctly applied for submission. See section 6.3.
Active ICPs with invalid NHH and/or HHR profiles recorded on the registry.	2	6	5	204	194	<p>HHR and NHH submission flags = Y. All 127 ICPs were HHR metered ICPs with some unmetered load which is settled as NHH, or timing differences resolved prior to the audit.</p> <p>Profile inconsistent with submission flags. Six inconsistencies were found. Four were corrected prior to the audit, and two were identified and corrected during the audit.</p> <p>ICP 0000010704TR2D7's registry records are inconsistent with the profiles and submission types recorded in SAP. It has been submitted as HHR since 8 August 2023, but the registry shows a NHH record on 8 August 2023 which coincided with a pricing change in SAP.</p>
Incorrect generation profiles recorded on the registry.	5	-	21	-	28	Five ICPs with PV1 profile were confirmed not to have generation and CTCT corrected the profiles on discovery during the audit. Refer to section 6.1.

Issue	Dec 2023 Qty	Feb 2023 Qty	Apr 2022 Qty	Aug 2021 Qty	Jan 2021 Qty	Comments
Arc category two meters submitted as HHR	192	884	-	-	-	CTCT has 192 “active” ARCS HHR settled ICPs. All have metering category one, and have the multiplier flag = N. These meters are expected to be settled as NHH because ARCS data does not contain the required number of decimal places.
Incorrect status recorded on the registry	9	18	7	12	16	Four new connections and four reconnections had incorrect “active” status dates. See sections 3.5 and 3.8 . One disconnection had an incorrect “inactive” status date. See section 3.9 .

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

- **Unmetered load discrepancies**, which included incorrect settlement unit information for 36 ICPs, and incorrectly calculated daily unmetered kWh for ICPs 0007206698RNF30, 0000441035MP771, 0006000102HB2F1 and 0900090608PC5E4; full detail is provided in **sections 3.7** and **12.7**,
- **Status discrepancies**, which included individual ICPs with incorrect statuses or event dates, inactive consumption exceptions which had not been resolved and incorrect settlement units in SAP; full detail is provided in **sections 3.8** for “active” status updates, **3.9** for “inactive” status updates and **12.7** for settlement unit issues, and
- **Profile discrepancies**, including profiles inconsistent with the submission flag, ICPs with profiles requiring control devices where the registry profile differs from the submission profile, and ICP 0000010704TR2D7 where the SAP and registry record different profiles.

Registry and static data issues present during the previous audit were reviewed, and I have recorded instances where the issues are still present throughout the report.

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**.

Where a meter is found not to be accurately recording consumption due to a fault or bridging, a spreadsheet template is used to estimate consumption for the affected period based on consumption before or after the fault. The correction is processed in SAP by:

- removing the meter on an estimated closing read which includes the unrecorded consumption and then opening the new meter on the correct start reading, or
- using the meter reprogram process to capture the unrecorded consumption on an end reprogram read, and restart the meter on the reading when the fault was resolved.

Readings are locked after billing, and bills need to be reversed in order to amend readings. For each of the correction methods the consumption will automatically flow through to reconciliation submissions if completed within the last 14 months. If correction affects periods more than 14 months ago, adjustment to submission records is required to ensure that the full correction is processed.

NHH corrections were reviewed:

<p>Defective meters</p>	<p>Potential meter defects are identified by customers, MEPs and read validation processes. Typically, a service order is raised (specifying the issue) to replace the meter and once paperwork is returned workflows will automatically transfer the data to SAP and process a meter replacement without user intervention. CTCT has a process to search ORB jobs for key words to identify jobs that may require corrections to be processed. The paperwork for these jobs is checked and a correction is processed to capture any consumption during the stopped or faulty period by entering an estimated closing read or meter reprogram reads.</p> <p>I checked ten examples of suspected stopped or faulty meters where the service order type was stopped meter and found accurate corrections had been processed.</p> <p>I re-checked corrections which had not been made at the time of the previous audit. The corrections were completed except for ICP 0121730131LCBD3 which needs its submission type moved to NHH so that a correction for a stopped meter relating to November 2022 can be processed.</p>
<p>Incorrect multipliers</p>	<p>A weekly databricks report identifies meters where the multiplier in SAP differs from the registry multiplier and sends a list of exceptions to the operations team for correction. Multiplier corrections are resolved by correcting the meter master data in SAP manually. If the ICP has already been invoiced, the invoices must be reversed before the correction can be processed.</p> <p>Nine examples of incorrect multipliers were identified during the audit period, and I found they were processed correctly.</p>
<p>Bridged meters</p>	<p>Bridged meter processes are discussed in detail in section 2.17. Once the meter is unbridged and paperwork is returned workflows will automatically transfer the data to SAP and process a meter replacement without user intervention. CTCT has a process to search ORB jobs for key words to identify jobs that may require corrections to be processed. The paperwork for these jobs is checked and a correction is processed to capture any consumption during the stopped or faulty period by entering an estimated closing read or meter reprogram reads.</p> <p>There were 133 ICPs where the meter had been bridged and unbridged during the audit period. 11 ICPs did not have corrections processed, and one ICP had a correction processed but the wrong read type was applied. The affected ICPs are listed in appendix 15.2.</p> <p>I re-checked bridged meters identified during the previous audit where corrections had not been processed and found they had been cleared.</p>
<p>Consumption while inactive</p>	<p>No consumption is submitted for inactive ICP days in SAP. If part of a read-to-read to read period is "inactive" some of the consumption will be apportioned to inactive days and omitted from submission. The issue can be resolved by ensuring that the ICP has "active" status in SAP and the registry for all days it is consuming energy and entering disconnection and reconnection boundary readings.</p> <p>CTCT's agents and MEPs continue to read "inactive" ICPs, and the reads are loaded into SAP. SAP generates a BPEM for the wellbeing team where consumption is found on a disconnected ICP based on a scheduled meter reading. Each exception is reviewed individually to determine whether the consumption is genuine, and when the consumption occurred. The team re-initiates disconnection as required. A correction is usually processed by updating the status to "active" for the read-to-read period with consumption, with other teams providing assistance with entering boundary reads. Wellbeing team members have recently been trained to enter boundary readings.</p> <p>CTCT has found that not all inactive consumption exceptions are identified by the BPEMs, and the number of current exceptions has increased over this audit period from 377 ICPs to 636 ICPs and 127,192 kWh of inactive consumption to 549,610 kWh. ICT tickets have been raised to identify the reasons for differences between ICPs with inactive consumption identified</p>

	<p>through reporting and the BPEMs to determine whether the BPEM criteria needs to be revised, and to investigate the settlement unit errors.</p> <p>A sample of 25 ICPs with inactive consumption were checked including the 20 with the most inactive consumption. I found seven ICPs had not had corrections processed (31,841 kWh of inactive consumption).</p> <p>I also rechecked inactive consumption which had not been corrected at the time of the previous audit and found a correction had been processed for one of the 67 affected ICPs and there is still 51,598.72 kWh of inactive consumption which requires investigation and correction.</p> <p>The affected ICPs are listed in appendix 15.1. Improvement is required in this area to ensure that inactive consumption is consistently identified and corrected.</p>
Unmetered load	<p>If unmetered wattage or on hours are updated in SAP, the revised data will flow through to revision submissions automatically as long as the effective date is within the last 14 months. I checked five examples of unmetered load corrections and found four were correctly processed and ICP 0900090608PC5E4 had incorrect unmetered load reported due to duplicated installation facts resulting in over submission of 0.465 for September 2023.</p>
Backdated status and trader updates	<p>Where a status or trader update affecting submission is backdated more than 14 months, a manual correction needs to be processed to capture the consumption within the 14-month submission window. CTCT considers ICPs which have backdated updates affecting submission but does not always process them unless a material error has occurred and in many cases the reconciliation team were not advised about the backdated events until they were chosen as samples during this audit.</p>

Submission accuracy issues are discussed in detail in **section 12.7**. There were some instances where inaccurate information was not corrected at the next available opportunity:

- incorrect statuses or event dates, or backdated event dates where only consumption within the last 14 months was captured,
- incorrect unmetered load submissions for some ICPs,
- incorrect submission types or settlement units for some ICPs,
- consumption not estimated for periods where meters were bridged for some meters,
- application of default profiles instead of seasonal adjusted shape values,
- unreported generation consumption for ICP 0000277231MP9F7,
- unapproved submission by subtraction for ICP 1001157629CK617, and
- ARCS meters settled as HHR.

I re-checked the previous audit submission accuracy issues which did not recur this audit and are not already discussed above. The previous audit had recorded non-compliance where the data is not fully investigated to determine whether the midnight reads, or interval data, is correct before making the correction when the data fails check sum validation; I agree that investigation should occur for large differences, but believe it is impractical to verify whether the reads or interval data is incorrect for every sum-check difference.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCT</p> <p>Identification of submission issues outside the 14-month submission window and</p>	<p>CTCT</p> <p>I recommend using the AC020 audit compliance report to identify backdated status updates (AC020Trader01, AC020Trader02,</p>	<p>Contact is in the process of developing and testing a new exception management tool (EMT).</p> <p>This tool will encompass a 14-month historical view of</p>	<p>Investigating</p>

Recommendation	Description	Audited party comment	Remedial action
creation of corrections	AC020Trader05) and trader updates (AC020Trader03) backdated more than 260 days which may require further correction to ensure that all consumption is captured within the 14-month submission window and correct submission attributes are applied.	existing and new discrepancy reports to ensure data inaccuracies causing incorrect submission and/or non-compliances are captured and corrected at the earliest convenience, and within the 14-month submission window. We are investigating opportunities to utilise the AC020 reports within our EMT to further identify and manage back dated status and trader updates within the Registry which may have an impact on submission accuracy.	

CTCS

Registry and static data accuracy

Registry updates are processed directly on the registry using the web interface, and Salesforce is updated at the same time. The user will identify any failed updates by reviewing the registry acknowledgement message displayed after they save the update. Registry information is imported into Salesforce at 12.50pm and 12.30am daily.

Activities which require registry updates such as new connections, disconnections, reconnections, and metering changes are managed using Salesforce cases and Microsoft Outlook. These cases are assigned to team members and can easily be reassigned if they are absent. Next actions and next action dates are set for each case.

Data accuracy is monitored using a combination of Salesforce Dashboard reports, and other reports and queries, and the registry AC020 audit compliance report. CTCS runs a business day checklist to ensure that all checks are completed on time.

CTCS also maintains a “non-compliance log” which records ICPs where non-compliant activity has occurred, such as late or inaccurate registry updates. The log provides an explanation and any corrective action taken and is used to understand the causes of non-compliances and identify improvements CTCS could make to prevent recurrence. The log was very helpful during the audit, and I found CTCS had already identified and investigated many of the non-compliances I identified during the audit analysis.

The following data accuracy checks are completed:

Validation area	Validations
ANZSIC codes	<p>The Salesforce Dashboard reports on ICPs which have T9 series unknown ANZSIC codes, and L671 property operator ANZSIC codes indicating that they are vacant. These exceptions are reviewed at least monthly.</p> <p>The registry AC020 audit compliance report is reviewed fortnightly to identify ICPs with meter category two or higher and residential ANZSIC codes to confirm whether they are accurate.</p> <p>The Head of Pricing and Risk reviews ANZSIC codes for reasonableness including ICPs where the ANZSIC code is inconsistent with the network pricing code. Exceptions are passed to the</p>

Validation area	Validations
	<p>operations team for investigation and correction fortnightly. As time allows ICPs with each ANZSIC code are being checked for consistency with the customer’s name, and any exceptions are investigated.</p>
Unmetered load	<p>New unmetered load ICPs will be identified through the Salesforce dashboard’s MADRAS workflow checks because a new unmetered load dummy register will need to be created. When distributor unmetered load details change, Salesforce creates a case. The unmetered load details are checked and updated as necessary.</p> <p>Fortnightly the Head of Pricing and Risk provides the compliance teams lists of new unmetered ICPs gained, changes to trader or distributor unmetered load details, and unmetered ICPs lost since her last update. These lists are created by analysing registry list information and are reviewed to ensure that the unmetered load is set up correctly in DataHub, MADRAS, and the unmetered ICPs spreadsheet, and the values are recorded correctly.</p> <p>The AC020 audit compliance report is reviewed at least fortnightly, to identify any “active” ICPs with a metering category which is nine or blank.</p>
Metering and reading	<p>The Salesforce Dashboard reports on:</p> <p>ICPs with estimated switch in reads with an AMI meter, which are checked every two to three days to determine whether read renegotiations are required.</p> <p>HHR reconciled ICPs which have not received actual meter readings in the last seven days. These ICPs are followed up with the MEP to determine whether the issue preventing readings will be resolved and if the AMI flag will be corrected. Operations will change the profile, submission type and reading route to NHH once the MEP has updated the AMI flag or confirmed that the issue cannot be promptly resolved.</p> <p>ICPs where registry metering information is different to DataHub including meter number, multiplier, content code, number of registers or meters, import metering without installation type B or G through the Registry Metering Workflow – NHH supply dashboard. These are reviewed twice weekly and any missing paperwork is followed up with the MEP.</p>
New connections	<p>The Salesforce Dashboard reports ICPs with “inactive - new connection in progress” status, including their initial electrical connection dates and MEP details if populated on the registry. This report is reviewed daily, and any ICPs with initial electrical connection dates or meter certification details are checked and updated to “active” status once the correct connection date is confirmed. The report is also used to track MEP nominations.</p> <p>The Salesforce Dashboard reports ICPs which are at “new” or “ready” status, which is compared to a registry list which has CTCS as the proposed trader. Any new ICPs from the registry list are added to Salesforce, and application details are followed up with the customer and/or network as needed. There is currently no active monitoring of ICPs which have been at “new” or “ready” status for over 24 months. A small number of new connections are completed, and they are closely monitored.</p> <p>New connection accuracy discrepancies are identified through the twice monthly review of the AC020 audit compliance report.</p>
Inactive ICPs	<p>The Salesforce Dashboard reports inactive de-energised ICPs, which are reviewed monthly to confirm that the “inactive” status is correct and genuine. Reference notes can be added against each ICP in Salesforce.</p>
Distributed generation	<p>Until new datawarehouse reporting is developed, CTCS completes a quarterly check of ICPs with distributed generation using a registry list report and event detail report. Checks are</p>

Validation area	Validations
	<p>completed to determine whether the ICP is generating, if flow metering is installed and the profiles are correct.</p> <p>The Salesforce dashboard reports NHH ICPs with installation type B, including their profile. This is checked to ensure that generation ICPs have the correct profile assigned.</p>
MADRAS workflow issues	<p>MADRAS workflow issues are checked daily for business days 1-4, 6, and 9-13 each month, and then every week for the remainder of the month.</p> <p>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.</p> <p>The Salesforce Dashboard produces a series of reports for ICPs which have missing MADRAS workflows, are not set up in MADRAS, or are end dated but CTCS is still responsible for the ICP. These discrepancies are investigated and resolved.</p>

Analysis of the AC020 audit compliance report and registry list for CTCS found:

Issue	CTCS Dec 2023 Qty	CTCS Feb 2022 Qty	CTCS Apr 2022 Qty	CTCS Aug 2021 Qty	CTCS Jan 2021 Qty	Comments
ICP at status "new connection in progress" (1,12)	7	20	13	14	3	Compliant.
Active date variance with Initial Electrical Connection Date and/or meter certification date	23	22	13	26	4	See section 3.5 .
Active ICPs with metering category three or higher with NHH submission flag	0	0	0	0	0	Compliant.
Active ICPs with blank ANZSIC codes	5	0	0	0	0	The five ICPs are all residual load ICPs and there is no industry code.
Active ICPs with ANZSIC "T994" or "T994000" don't know	0	0	0	2	0	Compliant.
Active ICPs with ANZSIC "T997" "response unidentifiable"	0	0	0	0	0	Compliant.
Active ICPs with ANZSIC "T998" "response outside of scope"	0	0	0	0	0	Compliant.
Active ICPs with ANZSIC "T99", "T999" or "T999999" not stated	0	0	0	0	0	Compliant.

Issue	CTCS Dec 2023 Qty	CTCS Feb 2022 Qty	CTCS Apr 2022 Qty	CTCS Aug 2021 Qty	CTCS Jan 2021 Qty	Comments
Active ICPs with metering category three or above with a residential ANZSIC code	1	0	0	1	0	See section 3.6 .
Active ICP with no MEP and unmetered flag set to N	6	0	2	3	0	All had MEP nominations made and accepted and were awaiting meter asset data.
Active ICP with meter category nine or blank and unmetered flag set to N	6	0	5	0	0	All had MEP nominations made and accepted and were awaiting meter asset data.
ICPs with Distributor unmetered load populated but retail unmetered load is blank or 0	0	0	0	0	0	Compliant.
ICPs with unmetered load flag Y but load is recorded as zero, excluding SB ICPs	2	1	2	3	1	See section 3.7 .
ICP with incorrect standard unmetered load	0	0	2	3	0	Compliant.
ICPs with incorrect shared unmetered load	0	0	0	0	0	Compliant.
Submission against the RPS profile where the registry has a controlled profile.	0	0	0	0	0	Compliant.
Active ICPs with invalid NHH and/or HHR profiles recorded on the registry.	0	0	0	0	0	0000275289HB0B4 has HHR and RPS profile and HHR and NHH submission type validly recorded because it is a HHR settled ICP with unmetered load attached.
Incorrect generation profiles recorded on the registry.	0	0	0	0	0	Compliant.
Arc category two meters submitted as HHR	0	0	0	0	0	Compliant.
Incorrect status recorded on the registry	1	2	0	11	2	ICP 0001780783TG6A6 was incorrectly at “ready” status from 2021 to 2024 and was decommissioned during the audit. See section 3.9 .

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

- ICP 0001780783TG6A6 was created in 2021 and was moved to “decommissioned - set up in error” status during the audit; the Account Manager advised that the ICP was no longer required in 2021, but due to an oversight the operations team did not initiate the decommissioning until 2024, and
- the upgrade for ICP 0000052134HBB2B was made effective from the wrong date; the ICP was moved to HHR from 28 June 2023 consistent with the registry metering record, but should have been moved to HHR from 27 June 2023, consumption on the HHR register for the meter change date (estimated to be less than 5 kWh) was not reported.

Registry and static data issues present during the previous audit were reviewed and found to be resolved.

Read and volume data accuracy

Read and volume accuracy issues are identified through validation processes, which are described in detail in **sections 9.5 and 9.6**. I walked through the correction process for each correction type and viewed examples where available.

Defective meters	<p>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.</p> <p>I reviewed one example of a NHH defective meter correction and confirmed it was accurately processed.</p>
Incorrect multipliers	<p>Meter multiplier discrepancies appear on Salesforce’s NHH Registry dashboard and are reviewed periodically. Multipliers are stored in Salesforce and DataHub based on the metering information held on the registry. Raw readings and meter installation information including the multiplier are sent to EMS and loaded into MADRAS. MADRAS correctly applies the multiplier provided when calculating volumes.</p> <p>When a multiplier changes for an existing meter, 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. Where meter paperwork is received, the case instructions note that the multiplier on the paperwork should be checked against the registry record and queried with the MEP if inconsistent. This validation was added after some inconsistencies were found though ad hoc checks of meter multipliers.</p> <p>ICP 0042167404PC481 had a multiplier change from 1 to 40, which has since been reversed back to 1. CTCS intends to check the multiplier and process a correction once this is confirmed.</p>
Bridged meters	<p>Estimated consumption during the bridged period will be estimated based on consumption before the meter is bridged, or after the meter is unbridged. If the meter is replaced on bridging, a permanent estimate removal reading will capture the consumption during the bridged period. If the meter is not replaced, CTCS will create a copy of the meter to capture the consumption by closing the current instance of the meter and opening a new instance of the meter on the current reading less the consumption during the bridged period.</p> <p>No bridged meters were identified during the audit period.</p>
Consumption while inactive	<p>Data streams remain open in DataHub when an ICP is disconnected, which allow reads to continue to be imported if received after disconnection. Two ICPs with inactive consumption were identified, both had consumption of a maximum of one unit which appears to be due to meter creep or how the meter is read when it is between units.</p>

Unmetered load corrections	<p>CTCS 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.</p> <p>No daily unmetered load changes were identified on the event detail report.</p>
Backdated status and trader updates	<p>Where a status or trader update affecting submission is backdated more than 14 months, a manual correction needs to be processed to capture the consumption within the 14-month submission window. CTCS considers ICPs which have backdated updates affecting submission but does not normally process a correction unless significant under submission has occurred. I identified the following corrections which were expected to be processed:</p> <p>ICP 0000007007NZ1AD backdated status update to "active" from 1 February 2022 on 12 April 2023.</p> <p>ICP 0000626629TP447 backdated status update to "inactive" from 1 February 2021 on 16 May 2023.</p> <p>ICP 0007109850WM31B backdated status update to "inactive" from 1 January 2021 on 26 May 2023.</p> <p>ICP 0000298513MPF38 backdated update to remove unmetered load when a meter was installed from 29 December 2021 on 26 May 2023.</p>

Submission accuracy issues are discussed in detail in **section 12.7**. There were some instances where inaccurate information was not corrected at the next available opportunity:

- incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions,
- invalid generation of forward estimate where MADRAS cannot find shape values or the ICP is supplied for one day,
- replacement of actual interval data with estimates when part day HHR data is received,
- incorrect labelling of historic estimate where seasonal adjusted shape values (SASV) published by the reconciliation manager are not available for part or all of a read-to-read period, or the seasonal shape values provided for the read-to-read period are all zero values,
- incorrect calculation of historic estimate due to missing readings in MADRAS for ICP 0000011643EA7E3 (April 2023) because some readings were not sent to MADRAS due to timing,
- one HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39, and
- four HHR corrections were inaccurately processed.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCS</p> <p>Identification of submission issues outside the 14-month submission window and creation of corrections</p>	<p>CTCS</p> <p>I recommend using the AC020 audit compliance report to identify backdated status updates (AC020Trader01, AC020Trader02, AC020Trader05) and trader updates (AC020Trader03) backdated more than 260 days which may require further correction to ensure that all consumption is captured within</p>	<p>Simply Energy have implemented the monitoring of the audit compliance report for any backdated status updates starting end of February 2024.</p> <p>Our Operations Team keeps the Compliance Team informed of any historical metering or switch read changes.</p>	<p>Identified</p>

Recommendation	Description	Audited party comment	Remedial action
	the 14-month submission window and correct submission attributes are applied.		

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 10.6, 11.2, 15.2 From: 01-Apr-23 To: 28-Feb-24	CTCT Some inaccurate data is recorded and was not updated as soon as practicable. Some previous audit corrections not carried out. CTCS Some inaccurate data is recorded and was not updated as soon as practicable. Potential impact: High Actual impact: High Audit history: Multiple times Controls: Moderate Breach risk rating: 6		
Audit risk rating	Rationale for audit risk rating		
High	The controls are moderate overall. Contact is working to investigate issues and improve controls, including improving processes to identify and correct data accuracy errors so that revised submission data can be provided. The impact is high based on the volume differences identified and that some corrections have not yet been completed.		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>CTCI</u> Active ICP with no MEP and unmetered flag set to N/ Active ICP with meter category nine or blank and unmetered flag set to N The exceptions identified during the audit primarily stem from instances where MEPs have auto accepted the MN response, while the loading of the corresponding metering details remains pending. These instances are monitored via our Registry Discrepancy Reporting within Data Bricks. As instances are identified, an investigation is undergone to determine whether the missing MEP events is a result of data inaccuracies within our MEP proposal.		Ongoing	Identified

<p>Profile discrepancies/Incorrect generation profiles</p> <p>The profile code for ICP 0000010704TR2D7 has been corrected to RPS in the Registry.</p> <p>Contact have robust reporting in place to promptly detect profile related data discrepancies within SAP and the Registry.</p> <p>We proactively engage with customers, distributors, and MEPs, to address instances where ICPs, flagged through our fortnightly reporting, exhibit generation related data inaccuracies within our system or the Registry.</p> <p>UNM discrepancies</p> <p>The incorrectly calculated daily unmetered kWh for ICP 0007206698RNF30 has been fixed in the registry.</p> <p>Contact currently monitors various UNM related discrepancies between SAP and the Registry, however, we acknowledge shortfalls in our report has been realised, resulting in not all UNM related discrepancy types being captured.</p> <p>Efforts are underway to enhance our existing report to capture all types of UNM discrepancies effectively. Additionally, discussions with our SAP technical team are ongoing to develop new mechanisms to ensure UNM changes within the Registry are replicated in SAP in a timely manner.</p> <p>Incorrect status recorded on the registry</p> <p>Contact has strong reporting in place to monitor status events recorded on the Registry for all ICPs associated with the CTCT participant code. We continue to actively explore opportunities to further enhance our effectiveness in monitoring these events, as outlined under the preventative actions tab.</p> <p><u>CTCS</u></p> <p>Incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe. Issues identified during the audit are being reviewed and added into this process for correction.</p>	<p><u>CTCS</u></p> <p>15 Mar 2024</p>	
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<p>Invalid generation of forward estimate where MADRAS cannot find shape values or the ICP is supplied for one day</p> <p>A new monthly check has been implemented to find ICPs supplied for only one day (which is very rare for Simply Energy) and manually process a correction through MADRAS for these. The first run of this check will identify and correct all issues going back 14 months.</p>	Ongoing	
<p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>A ticket has been raised to Axos to resolve the replacement of part actual interval data. Once this change has been released, we will assess how far back data can be re-loaded to address any historical issues.</p>	Ongoing	
<p>Incorrect labelling of historic estimate where seasonal adjusted shape values (SASV) published by the reconciliation manager are not available for part or all of a read-to-read period, or the seasonal shape values provided for the read-to-read period are all zero values</p> <p>Development work is pending from EMS to resolve the incorrect labelling of Historic Estimates, once this change is released, it is our expectation that historic issues going back 14 months from the date of the release will be addressed.</p>	Ongoing	
<p>Incorrect calculation of historic estimate due to missing readings in MADRAS for ICP 0000011643EA7E3 (April 2023) because some readings were not sent to MADRAS due to timing</p> <p>Issue was identified in January 2024 and affected the April and May 2023 consumption months where the R7 submissions had already been completed in October and November 2023 accordingly. The missing reads were sent to MADRAS for ICP 0000011643EA7E3 in March 2024 which is in time for the R14 wash ups scheduled for submission in June and July 2024.</p>	Ongoing	
<p>One HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39</p> <p>The Simply Energy Operations Team worked with both the MEP and previous trader when ICP 0000545550NRC39 switched in but were not able to confirm till a later date whether the</p>	N/A	

<p>metering details uploaded to the Registry were accurate. This was why no estimation was provided in the initial Reconciliation. This issue was not resolved until Revision 3. Simply's normal process when there is missing TOU data at first submission is to estimate based on RFP information however the team were not confident loading estimated data into the metering configuration as received from the Registry given there was concern that this was inaccurate.</p> <p>Four HHR corrections were inaccurately processed.</p> <p>The 4 HHR correction errors have been actioned following the Audit.</p>	<p>15 Mar 2024</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Contact is committed to enhancing operational effectiveness and data accuracy across our process, systems and the Registry. We are actively pursuing several improvements and initiatives to streamline our processes and reporting, some noted below:</p> <ul style="list-style-type: none"> a) Implementation and testing of a new Exception Management Tool (EMT). This tool, providing a 14-month historical view of existing and newly created reports, aims to identify and rectify data inaccuracies promptly, ensuring compliance within the submission window. b) Conducting a comprehensive review of resource allocation to optimize staffing across operational processes and reporting functions. c) Engaging in ongoing discussions with MEPs and field contractors to enhance the quality of paperwork and documentation processes, further improving data accuracy and compliance measures. <p><u>CTCS</u></p> <p>Incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe.</p>	<p><u>CTCT</u></p> <p>Ongoing</p> <p><u>CTCS</u></p> <p>Ongoing</p>	

<p>Invalid generation of forward estimate where MADRAS cannot find shape values or the ICP is supplied for one day</p> <p>A new monthly check has been implemented to find ICPs supplied for only one day (which is very rare for Simply Energy) and manually process a correction through MADRAS for these.</p>	Ongoing	
<p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>A ticket has been raised to Axos to resolve the replacement of part actual interval data.</p>	Ongoing	
<p>Incorrect labelling of historic estimate where seasonal adjusted shape values (SASV) published by the reconciliation manager are not available for part or all of a read-to-read period, or the seasonal shape values provided for the read-to-read period are all zero values</p> <p>Development work is pending from EMS to resolve the incorrect labelling of Historic Estimates.</p>	30 June 2024	
<p>Incorrect calculation of historic estimate due to missing readings in MADRAS for ICP 0000011643EA7E3 (April 2023) because some readings were not sent to MADRAS due to timing</p> <p>A ticket has been raised to resolve the missing readings not sent to Madras for ICP 0000011643EA7E3.</p>	30 June 2024	
<p>One HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39</p> <p>Simply believes this issue was a one-off as normal process would have provided an estimate for the interim reconciliation on all TOU ICPs.</p>	N/A	
<p>Four HHR corrections were inaccurately processed.</p> <p>An additional step has been added to the HHR corrections process to minimise any future errors in this area.</p>	Ongoing	

2.2. Provision of information (Clause 15.35)

Code reference

Clause 15.35

Code related audit information

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

Audit observation

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

Audit commentary

Processes to find and update incorrect information were observed during the audit 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

I checked the data transfer process and traced a sample of readings and interval data from the source to Contact's systems.

Audit commentary

CTCT

Generation

Generation meters are interrogated by MV90 hourly, and the data is validated and exported to Oracle and then SAP. I walked through the process and traced a sample of data from MV90 through to SAP and submission files which confirmed that the data was recorded accurately.

NHH

NHH readings are received from MEPS and MRS via SFTP. I walked through the process and traced a sample of data for 16 ICPs from the raw meter data files provided by MRS, BOPE, DELT, FCLM, IHUB, LMGL, MTRX, NGCM, SMCO and TRUM to SAP which confirmed that the data was recorded accurately.

HHR and AMI data

CTCT supplies three ICPs with meter category three or higher:

- ICPs 0000018218HRB13 and 0000032431HR99C are generation ICPs with meter category five and data is collected by CTCT using MV090 and then transferred to Oracle and SAP, and
- ICP 1001157629CK617 had HHR data supplied to CTCT by Blue Current Assets NZ Limited, and compliance with this clause has been demonstrated by Blue Current Assets NZ Limited.

For the other HHR settled ICPs, AMI read data is received from MEPs and agents via SFTP. AMI data is first imported into IMDM which is a schema within the COLA oracle database. IMDM information is viewed and validated using the Smart Reads Console interface, and then the data is transferred from IMDM to SAP.

If reads are not available for all the ICPs meters and registers on the scheduled read date, SAP searches for the most recent date with readings for all meters and registers in SAP's midnight reads table. If available, it will retrieve the most recent read in the last three days for ICPs with monthly scheduled reads, and the last day's read for ICPs with weekly or fortnightly scheduled reads. If reads are not available for all registers the available readings are uploaded and the reads for the remaining registers are estimated.

I traced a sample of data from the raw meter data files provided by agents and MEPs through to the submission files for ACCM, AMCI, ARCS, BOPE, COUP, FCLM, IHUB, MTRX, NGCM and SMCO, and confirmed that the data was recorded accurately.

CTCS

NHH

NHH readings are received from Wells and MEPs via SFTP. Manual readings are loaded into the datawarehouse, and a daily read file is extracted and imported into DataHub, and AMI readings are loaded directly into DataHub.

Contact Energy owns some sites in Central Otago, and their staff provide meter readings via email. They take a photo of the meter and email it to CTCS along with any comments on the meter's condition. The readings are entered into DataHub as actual readings.

Once validation is complete in DataHub, the validated (published) reads are exported back to the datawarehouse, and then to AXOS billing engine and MADRAS for NHH settled ICPs through the "PushActual" process. The "PushActual" process ensures that all readings which have been entered, modified, removed, or invalidated since the process was last run are sent to MADRAS.

I traced a sample of readings received from Wells, Contact Energy, and each MEP from the source files to DataHub and MADRAS for NHH settled ICPs and confirmed that the data was recorded accurately.

HHR and AMI

Blue Current Assets NZ Limited, EDMI and MEPs provide HHR data which is imported directly into DataHub. I traced a sample of data from the raw meter data files provided by agents and MEPs through to the submission files for a sample of 14 HHR settled ICPs and confirmed that the data was recorded accurately.

Audit outcome

Compliant

2.4. Audit trails (Clause 21 Schedule 15.2)

Code reference

Clause 21 Schedule 15.2

Code related audit information

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

The audit trail must include details of information:

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

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

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

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

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

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

Complete audit trails are available for all data gathering, validation and processing functions for NHH, HHR and generation data. The logs of these activities for CTCT and all agents include the activity identifier, date and time and an operator identifier. I confirmed original data is retained during the read and volume estimation and correction processes.

CTCS

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 original data is retained during the read and volume estimation and correction processes.

A compliant manual permanent estimate log is used where permanent estimates are created and this was reviewed during the audit.

Agent systems

Compliance is recorded in the agent audit reports.

Audit outcome

Compliant

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

Code reference

Clause 10.4

Code related audit information

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

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

Audit observation

I reviewed the current terms and conditions for all brands supplying ICPs under the CTCT or CTCS codes.

Audit commentary

The 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 the current terms and conditions for all brands supplying ICPs under the CTCT or CTCS codes and discussed compliance with these clauses.

Audit commentary

The terms and conditions include consent to access for authorised parties for the duration of the contract. Contact Energy supports other parties to gain access to metering by providing information and liaising with their customers.

CTCT

CTCT provided three instances where access was requested but was unable to be arranged due to the cost of scaffolding required to complete the work, and the best endeavours requirements were met.

CTCS

There were no instances where access to metering could not be arranged during the audit period.

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 one metering installation or category two 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 three 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

CTCT

CTCT is responsible for Te Huka 0000018218HRB13 where the capacity exceeds 10MW, and the distributor has published an individual loss factor. The generation loss factors are recorded in SAP as part of a profile formula and applied to the generation data as part of the pricing manager file creation process within SAP. I confirmed that the loss factor for Te Huka was correctly assigned in SAP.

CTCS

CTCS 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 the current terms and conditions for all brands supplying ICPs under the CTCT or CTCS codes.

Audit commentary

The terms and conditions contain the appropriate clauses to achieve compliance with this requirement.

Audit outcome

Compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

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

Audit observation

The new connection processes were examined in detail to evaluate the strength of controls, and the registry list, audit compliance, and switch breach history reports were examined to confirm process compliance.

Audit commentary

CTCT

New connection process

The new connection process varies by network.

- Where ICPs are directly requested from the network by the customer or their agent, the network sends through a notification and which CTCT accepts or declines. CTCT contacts the customer to arrange a customer supply agreement if it has not already been completed and raises a service order to complete the connection and install metering (if the ICP is to be metered).
- For ICPs requested by applying to CTCT, an application for a new ICP is raised with the network and a service order is raised to complete the connection and install metering (if the ICP is to be metered).

Once the work completion paperwork for the connection and meter installation is received, workflows update SAP and the registry to “active” status, and a trader update including MEP nomination is made.

CTCT do not use the “inactive - new connection in progress” status unless an ICP’s “active” date needs to be corrected to a later date, in which case the original “active” status update is replaced with an “inactive - new connection in progress” update.

I checked 20 new connections and confirmed that the expected process was followed, and responsibility was accepted.

Monitoring of new connections

A new connection breach report is emailed to the Network Operations Analyst External Customer Solutions each day. Databricks combines a registry list of ICPs at “new” and “ready” status with CTCT as the proposed trader with registry ICP information including the initial electrical connection date, ORB service order information, and SAP customer contract information. The report is shared with the operations and switching teams so that ICPs which require updates to “active” status can be identified.

Previously, CTCT had reporting which compared the “active” status date to the meter certification date and initial electrical connection date to identify potential inaccuracies. The report is not producing valid results because an update to one of the tables used has affected its accuracy, and it is no longer reviewed. Until the report is fixed, I recommend Contact validates “active” status dates using the registry AC020 audit compliance report sheet AC020Trader21 at least weekly.

Recommendation	Description	Audited party comment	Remedial action
CTCT Reinstate validation of “active” status dates for new connections	CTCT Validate “active” status dates for new connections against the meter certification date and initial electrical connection date weekly, using the AC020 audit compliance report sheet AC020Trader21.	Contact currently utilizes this report to validate new connection active dates. To improve the consistency of this reporting being reviewed, we are considering training additional staff members in this process.	Identified

All “active” metered ICPs have an MEP recorded. The audit compliance report recorded 98 “active” ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. 55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the registry after the report was run.

The audit compliance report identified six “new” ICPs which did not have an accepted MEP nomination within 14 business days. Three became metered after a period with an unmetered builder’s temporary supply and the MEP nominations were on time, and three invalidly appeared on the report and did have an MEP nomination made and accepted within 14 business days of the “active” date. ICP 0005265000ALF50 was a backdated new connection, and the MEP nomination was not processed until the ICP became “active”.

CTCS

New connection process

ICPs supplied under the CTCS code may be supplied by a white label retailer, Simply Energy or Contact Energy. The new connection process varies by network.

- Where ICPs are directly requested from the network by the customer or their agent, the network sends through a notification and which CTCS accepts or declines. CTCS contacts the customer to arrange a customer supply agreement if it has not already been completed and raises a service order to complete the connection and install metering (if the ICP is to be metered).
- For ICPs requested by applying to CTCS, an application for a new ICP is raised with the network and a service order is raised to complete the connection and install metering (if the ICP is to be metered).

CTCS claims ICPs on the registry at “inactive - new connection in progress” status, nominates the MEP and raises a service order for meter installation at the same time. 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.

New ICPs are created in Salesforce through its registry event detail import process, and then transferred overnight into DataHub. The data streams are created in DataHub and then imported the following night into Salesforce. Meter change paperwork is linked to the meter changes screen in Salesforce, and data stream set up and readings are checked and validated against this. Once validated readings are entered into DataHub they will be transferred to MADRAS if the ICP is NHH settled.

I checked ten new connections and confirmed that the expected process was followed, and responsibility was accepted.

Monitoring of new connections

A Salesforce case is created for each new ICP to manage the new connection workflow, and Outlook and spreadsheets are also used for monitoring. The Salesforce case remains open until the new connection job is completed, and Salesforce, DataHub, the registry, and MADRAS (if NHH settled) are updated.

There are checks to ensure that meters for new ICPs are set up correctly prior to submission. If there is no data stream in DataHub for an ICP-meter-register combination the file will be held and reimported at the end of the month, in case the data stream is unavailable due to a timing issue. If the readings fail to import at month end, the metering paperwork is followed up with the MEP. CTCS also intends to begin monitoring the proportion of HHR estimates in submissions regularly to identify issues where metering may not be correctly set up.

The audit compliance report recorded six “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 had an MEP nomination made and accepted and were awaiting meter asset data.

The audit compliance report did not identify any new connections where an MEP nomination was not accepted within 14 business days.

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, 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 process was examined in detail.

Audit commentary

CTCT

CTCT does not use the “inactive - new connection in progress” status, which means that if an ICP is temporarily connected before the “active” status date they may not be recorded as the trader on the registry.

CTCT has temporarily stopped its process to validate “active” status dates against the meter certification date and initial electrical connection date due to report accuracy issues, so may not be able to easily identify temporary electrical connections. A recommendation to resume the validation using the registry AC020 audit compliance report is made in **section 2.9**.

The AC020 audit compliance report identified nine ICPs where the meter certification date was earlier than the first “active” date. Six were confirmed not to be temporarily electrically connected, and the other three ICPs¹ are being checked with the MEP. If they are confirmed to be temporarily electrically connected, they will be updated to “active” status from the temporary electrical connection date.

¹ 0010000845TE9C4 MCD 18 May 2023 active from 19 May 2023, 0110013703ELFEE MCD 19 May 2023 active from 23 May 2023 and 1002182804UN6D5 permanent MCD 7 December 2023 temporary meter not documented on the registry active from 11 August 2023.

CTCS

CTCS usually claims ICPs at 1,12 “inactive new connection in progress” status which helps to ensure that the trader is recorded on the registry if an ICP is temporarily electrically connected.

The AC020 audit compliance report identified one ICP where the meter certification date was earlier than the first “active” date, which was confirmed not to be temporarily electrically connected.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(1)

Code related audit information

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

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

Audit observation

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

The AC020 audit compliance reports were examined to confirm process compliance and that controls are functioning as expected.

Audit commentary

CTCT

Active ICPs without metering

All “active” metered ICPs have an MEP recorded. The audit compliance report recorded 98 “active” ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. 55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the registry after the report was run.

The audit compliance report identified six “new” ICPs which did not have an accepted MEP nomination within 14 business days. Three became metered after a period with an unmetered builder’s temporary supply and the MEP nominations were on time, and three invalidly appeared on the report and did have an MEP nomination made and accepted within 14 business days of the “active” date. ICP 0005265000ALF50 was a backdated new connection, and the MEP nomination was not processed until the ICP became “active”.

New connections

CTCT do not use the “inactive - new connection in progress” status unless an ICP’s “active” date needs to be corrected to a later date, in which case the original “active” status update is replaced with an “inactive - new connection in progress” update.

CTCT had accepted responsibility for all newly electrically connected ICPs. The audit compliance report found 106 metered ICPs that were not certified within five business days of electrical connection and were not connected as unmetered builder’s temporary supplies. 74 of the ICPs had no meter certification details, and the other 32 ICPs had certification dates between nine and 182 business days after the initial electrical connection date. I checked the ten ICPs with the oldest status event dates and no certification, and the ten ICPs with the latest certification dates and found:

- 11 ICPs had BTS meters before becoming permanent metered supplies; the MEP did not record the BTS metering on the registry, and the first certification recorded was for the permanent meter,
- five ICPs had meters certified on the day they were installed but the MEP did not update the registry on time,
- two ICPs had incorrect MEP nominations preventing the MEP from updating the meter certification details on time, and
- two ICPs had their meter hung without being livened, but the contractor had not indicated that further work was required and no job for meter certification was raised.

Reconnections

Contact does not complete any specific checks that meters are certified. If they become aware that a meter requires certification, such as when a contractor has hung a meter and indicated that it needs to be certified, a certification job will be raised for the MEP.

The audit compliance report identified 207 reconnected ICPs where the meter was not certified within five business days of reconnection. A diverse sample of 20 ICPs with different MEPs were checked. Two were not genuine, because the update to “active” status was invalid², or the MEP had certified the meter on time but updated the registry late. The other 18 updates were late because CTCT had not identified that the certification had expired, or CTCT had identified that the certification had expired and raised a job for recertification which could not be completed.

Bridged meters

Meters are required to be certified on un-bridging, and CTCT issues field services jobs to “un-bridge and certify” to MEPs. CTCT provided a report of 133 ICPs where the meter had been bridged and unbridged. The meter was unbridged, replaced and certified, or unbridged and recertified for 128 ICPs and the other five ICPs³ have service orders raised for recertification.

CTCS

Active ICPs without metering

The audit compliance report recorded six “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 had an MEP nomination made and accepted and were awaiting meter asset data.

² 0000434474TPA6A had “active” status applied from 4 December 2022 because a misread supplied by the meter reader had indicated consumption and should have had “inactive” status.

³ 0000225220UNF81 unbridged 3 November 2023, 0186666004LCAD9 unbridged 31 October 2023, 1002039917UNC39 unbridged 4 August 2023, 0000106615UNEAE unbridged 27 July 2023, and 1001280262LCC8B unbridged 27 June 2023.

The audit compliance report did not identify any new connections where an MEP nomination was not accepted within 14 business days.

New Connections

CTCS usually claims ICPs at “inactive - new connection in progress” and nominates the MEP at the same time. Metered new connections are monitored to ensure that meter certification details are updated on the registry.

The audit compliance report found eight metered ICPs that were not certified within five business days of electrical connection and were not connected as unmetered builder’s temporary supplies. Six of the ICPs had no meter certification details, and the other two ICPs had certification dates between ten and 18 business days after the initial electrical connection date.

Reconnections

The operations team checks meters with certification which is expired or due to expire in the next three months using a Salesforce dashboard report. Jobs are raised for the MEP to recertify the meter as required.

Reconnection purchase orders for Wells contain text reminding staff to check that the meter certification is not expired on the registry. If there is no current certification, staff are expected to request re-certification. The reconnection job templates for MEPs do not mention meter certification.

All reconnections were certified within five business days of reconnection.

Bridged meters

No meters were bridged during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 2.11 With: Clause 10.33A</p> <p>From: 04-Oct-22 To: 06-Dec-23</p>	<p>CTCT</p> <p>90 new ICPs did not have their meters certified within five business days of initial electrical connection.</p> <p>207 reconnected ICPs did not have their meters certified within five business days of reconnection.</p> <p>Metering for five ICPs was not recertified on un-bridging. Service orders have been raised for the affected meters to be recertified.</p> <p>CTCS</p> <p>Eight new ICPs did not have their meters certified within five business days of initial electrical connection.</p> <p>Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating

Low	<p>Controls are moderate overall. CTCS controls are strong. CTCT will identify meters requiring certification where the MEP or contractor has indicated that further work is required after hanging the meter.</p> <p>The audit risk rating is low as a small proportion of ICPs were affected. Uncertified meters may have unidentified accuracy issues, but other validation processes will help to identify these.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Not certified within 5 BD</p> <p>We are unable to resolve this as the non-compliance has already been realised.</p> <p>Not re-certified on un-bridging</p> <p>We are in the process of rectifying the non-certification issue for the 5 ICPs mentioned. 3 of the 5 ICPs have now been certified.</p> <p><u>CTCS</u></p> <p>Issue has been cleared.</p>		<p><u>CTCT</u></p> <p>15/04/2024</p> <p><u>CTCS</u></p> <p>N/A</p>	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCT</u></p> <p>We are still working towards transitioning our pre-existing recertification monitoring reporting from SAS to Data Bricks.</p> <p>This transition presents an opportunity to enhance reporting capabilities and address ownership, responsibilities, and training needs with relevant teams.</p> <p>Additionally, improved commercial agreements are underway with smart meter providers for remote reconnections, aiming to minimize contractor visits and bridging of meters outside office hours.</p> <p><u>CTCS</u></p> <p>Simply Energy have identified more resource is needed in this space and as a result, are proactively training another member of the team to assist in this space which will ensure better data quality - Operations Team Lead is also acting as Quality Control.</p> <p>Simply Energy is also working with their internal system administrator to improve current process in Salesforce to assist</p>		<p><u>CTCT</u></p> <p>Ongoing</p> <p><u>CTCS</u></p> <p>Aug 2024</p> <p>Dec 2024</p>	

with timing and actions and to provide the Operations Team Leader visibility to assist and/or add resource where required.		
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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 compliance was assessed.

Audit commentary

CTCT

CTCT has previously demonstrated the existence of either a Use of System Agreement (UoSA) or trading arrangement for all relevant networks. CTCT did not begin trading on any new networks during the audit period.

The network is added to SAP once the UoSA is in place. SAP will not accept a new ICP or ICP switching from a network where there is no agreement or arrangement.

CTCS

CTCS does not have a process to identify new customer applications for ICPs on networks where they do not currently trade or have an arrangement with before they switch in. A registry list is checked fortnightly to identify ICPs which have switched in on networks not previously supplied, and then CTCS checks whether Contact has an existing agreement in place and if not arranges one.

CTCS intends to review its request for proposal and Emersion customer application processes to identify ICPs on new networks more quickly, so that arrangements can be put in place before they switch in.

CTCS began trading on the TOLQ network during this audit period, and an arrangement was put in place in January 2024, six months after the ICP switched in. A written agreement is being negotiated.

The previous audit found that there were no agreements or arrangements in place for SMAL or TIKL. Following the last audit, CTCS found there was an existing arrangement for SMAL, and an arrangement is now in place for TIKL.

CTCS has previously demonstrated the existence of either a UoSA or other trading arrangement for all other relevant networks.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.12 With: Clause 11.16 From: 01-Jun-23 To: 19-Jan-24	CTCS CTCS traded on ICPs connected to the TOLQ network where there was no arrangement or agreement in place. Potential impact: High Actual impact: Low Audit history: Twice previously Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate. CTCS had assumed that Contact had arrangements in place for these existing embedded networks and an arrangement is now in place. The impact is low because no issues arose during the audit period which could not be resolved because there was no arrangement in place.		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>CTCS</u> TOLQ were contacted and a contract put in place. This was signed by Simply Energy in January 2024.		19 Jan 2024	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<u>CTCS</u> Most networks will insist on a trader entering into a DDA before trading so in the unlikely case that this has not happened, a monthly check will be incorporated into the business day schedule to check for this and ensure we progress these to completion.		Ongoing	

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 examined and compliance was assessed.

Audit commentary

CTCT

The new connection process requires a valid MEP to be nominated and an MEP to be recorded for all metered ICPs. MEP nomination rejections are monitored using BPEMs.

An arrangement is now in place for BOPE via IntelliHUB, and CTCT has previously demonstrated that arrangements are in place with all other MEPs for their ICPs.

CTCS

The new connection process requires a valid MEP to be nominated and a MEP to be recorded for all metered ICPs. MEP nomination rejections are monitored by daily review of incoming MN files from the registry.

CTCS has previously demonstrated that arrangements are in place with all MEPs for their ICPs and did not begin using any new MEPs during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 10.33B

Code related audit information

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

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

Audit observation

The process for reconnecting ICPs in the process of switching in was examined, including review of reports used in the process. Traders are only able to update ICP status for event dates where they are responsible for the ICP on the registry.

Audit commentary

CTCT

Approximately every six months, CTCT reviews a databricks report which shows ICPs reconnected as part of the switching process where the switch is later withdrawn, to check whether the status is reasonable.

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

CTCS

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

Audit outcome

Compliant

2.15. Electrical disconnection of ICPs (Clause 10.33B)

Code reference

Clause 10.33B

Code related audit information

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

Audit observation

The disconnection process was examined. Traders are only able to update ICP status for event dates where they are responsible for the ICP on the registry.

Audit commentary

Contact only creates disconnection service orders where they have confirmed that they are the current trader for the ICP, and no switches are in progress.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

- *ensure personal are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code,*
- *replace the seal with its own seal,*
- *have a process for tracing the new seal to the personnel,*
- *update the registry (if the profile code has changed),*
- *notify the metering equipment provider.*

Audit observation

Policies and processes for removal and breakage of seals were reviewed. A sample of disconnections, reconnections, additions of export metering, and bridged meters were checked for compliance.

Audit commentary

CTCT

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

CTCT liaises directly with Delta for legacy meters, and the MEP for AMI and HHR meters. CTCT initiated field services jobs which could result in seals being removed or broken are raised in ORB.

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

CTCT receives work completion paperwork from Delta and the MEPs and uses this information to confirm the correct ICP attributes including status and profile, and update SAP and the registry. Service orders are monitored in ORB, and reports of overdue jobs are generated each Tuesday and emailed to Delta or the MEP for action.

If CTCT discovers that another party has removed or broken a meter's seals (such as the customer's electrician) they will arrange for the MEP to check and reseal the meter. CTCT provided five examples of service orders raised for broken seals or un-bridging meters and the requests included clear instructions on resealing and recertifying the metering.

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

CTCS

If initiated by CTCS, activities which could result in seals being removed or broken are completed by Wells, the MEP, or subcontractors to the MEP. Most disconnections and reconnections are completed remotely, and any metering changes or addition of distributed generation is completed by the MEP. Wells completes any on-site disconnections and reconnections.

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

CTCS receives work completion paperwork from Wells and the MEPs and uses this information to confirm the correct ICP attributes including status and profile, and update Salesforce, MADRAS and the registry. Service orders are monitored using cases in Salesforce and/or Microsoft Outlook, and overdue service orders are followed up.

If CTCS discovers that another party has removed or broken a meter's seals (such as the customer's electrician) they will arrange for the MEP to check and reseal the meter. I confirmed this process by reviewing one example where reseals occurred following the customer's electrician removing seals as part of remedial work on the installation.

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

Audit outcome

Compliant

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

Code reference

Clause 10.33C and 2A of Schedule 15.2

Code related audit information

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

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

If the trader bridges a meter, the trader must:

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

The trader must determine meter readings as follows:

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

Audit observation

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

Audit commentary

CTCT

CTCT only allows meters to be bridged where an urgent reconnection is required, and it is not possible to reconnect without bridging the meter. When an onsite reconnection is requested for an AMI meter, Delta phones the MEP while on site to attempt a soft reconnection, and only bypasses the meter if that fails. CTCT requires the contractor to use the FWR (further work required) function on the returned paperwork, which ensures that a job to “un-bridge and recertify” is raised with the MEP. Where the FWR box is not ticked, it is more difficult to identify meters that require un-bridging. They will be identified through the zero-consumption meter read validation, non-communicating meter checks, and keyword searches of ORB jobs.

CTCT provided a list of meters bridged where failing to bridge would have caused significant disadvantage to the customer during the audit period, including:

- **25 ICPs where the meter had been bridged but not unbridged:**
 - the MEP was notified of the bridging for 20 ICPs, four switched away before the MEP was notified, and one underwent a withdrawal removing CTCT’s period of supply,
 - service orders were raised for all ICPs except those which switched away or were disconnected,

- corrections to capture the bridged consumption will be made once the service orders are complete.
- **133 ICPs where the meter had been bridged and unbridged:**
 - the MEP was notified of bridging in all cases,
 - the meter was unbridged, replaced and certified, or unbridged and recertified for 128 ICPs and the other five ICPs⁴ have service orders raised for recertification, and
 - 11 ICPs did not have corrections processed, and one ICP had a correction processed but the wrong read type was applied. The affected ICPs are listed in **appendix 15.2**.

I re-checked bridged meters identified during the previous audit where corrections had not been processed and found they had been cleared.

CTCS

No bridging occurred during the audit period. Bridged meters would be identified through consumption validation checks, and review of reconnection paperwork. The bridged meter correction process has been documented in Confluence and is compliant.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.17 With: Clause 10.33C and 2A of Schedule 15.2 From: 06-Apr-23 To: 06-Dec-23	CTCT For four of the 158 bridged meters checked the MEP was notified of a bridged meter later than one business day from when Contact was notified. Volume corrections were not created or not created correctly for 11 bridged meters. Potential impact: Medium Actual impact: Unknown Audit history: Once Controls: Moderate Breach risk rating: 4
Audit risk rating	Rationale for audit risk rating
Medium	The controls are rated as moderate. The reporting and identification of bridged meters has improved, and corrections are more consistently processed. There is an increased risk that the MEP may not be notified, and corrections may not be processed where an ICP switches out soon after being identified. The audit risk rating is medium based on the number of ICPs with bridged meters identified.

⁴ 0000225220UNF81 unbridged 3 November 2023, 0186666004LCAD9 unbridged 31 October 2023, 1002039917UNC39 unbridged 4 August 2023, 0000106615UNEAE unbridged 27 July 2023, and 1001280262LCC8B unbridged 27 June 2023.

Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCI</u></p> <p>Contact is reviewing corrections for the 11 identified ICPs highlighted during the audit, which includes volume adjustments.</p> <p>We have implemented a systematic process and remain committed to its ongoing review and enhancement to mitigate future breaches.</p> <p>We have introduced a fortnightly review process for reconnection jobs in ORB, utilizing key word searches such as 'bridged' to identify cases where the FWR hasn't been selected by contractors. We will be monitoring this process closely and addressing any discrepancies identified with out contractors to improve notification procedures moving forward.</p>	<p><u>CTCI</u></p> <p>Ongoing</p>	Identified
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p>Please refer to the actions take to resolve field above.</p>		

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

Code reference

Clause 11.30

Code related audit information

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

Audit observation

A sample of invoices and letter templates relating to invoicing were reviewed to confirm that the ICP number is present.

Audit commentary

CTCT

Invoices contain the ICP number, and ICP numbers are included in communications relating to the sale of electricity. Only the account number is included on correspondence relating to payments, as one account can have one or many ICPs attached.

CTCS

CTCS customers are supplied under the Contact Energy, Simply Energy, Compass Communications or Plains Power brands. The invoices for all four brands contain the ICP number, and ICP numbers are included in communications relating to the sale of electricity.

Audit outcome

Compliant

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

Code reference

Clause 11.30A

Code related audit information

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

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

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

Audit observation

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

Audit commentary

CTCT

Clear and prominent information on Utilities Disputes is provided:

- on CTCT's website,
- on CTCT's invoices,
- in the text of letter templates including a generic template, and those related to pricing, invoicing, payments, complaints, outages, medically dependent customers, bonds, welcomes, transaction history,
- as part of the email footer for outbound emails,
- during chat, and
- as a recorded message for inbound telephone calls.

CTCS

CTCS customers are supplied under the Contact Energy, Simply Energy, Compass Communications or Plains Power brands.

All four brands have clear and prominent information on Utilities Disputes displayed on their websites, on their invoices, email footers, and in their terms and conditions. Directly addressed correspondence with customers is usually issued via email.

Utilities Disputes is promoted on all inbound phone calls for the Contact Energy, Simply Energy and Compass Communications brands. Plains Power intends to add a message about Utilities Disputes for inbound calls but ensures that the information is provided verbally when they respond to telephone enquiries.

Audit outcome

Compliant

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

Code reference

Clause 11.30B

Code related audit information

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

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

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

Audit observation

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

Audit commentary

CTCT

Clear and prominent information on Powerswitch is provided:

- on CTCT's website,
- on CTCT's invoices,
- in the text of letter templates including a generic template, and those related to pricing, invoicing, payments, complaints, outages, medically dependent customers, bonds, welcomes, transaction history, and
- as part of the email footer for outbound emails.

The annual notification requirement is met through issuing of invoices. All pre-pay meters have been switched to post pay mode, and all customers receive invoices.

CTCS

Information on Powerswitch is required to be provided to any customers with a residential ANZSIC code. Contact Energy, Simply Energy, Compass Communications and Plains Power have clear and prominent information on Powerswitch displayed on their website and invoices.

The annual notification requirement is met through issuing of invoices.

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

No registry activity occurred for CTCX during the audit period.

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The new connection process was examined in detail to 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 both of Contact's participant codes. All new connections had ICP numbers.

Audit outcome

Compliant

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

Code reference

Clause 11.7(2)

Code related audit information

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

Audit observation

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

Audit commentary

The new connection process is described in **section 2.9**. The processes in place ensure 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

Processes to manage status and trader updates were checked, and compliance was assessed by reviewing the AC020 audit compliance reports and checking a sample of late updates.

Audit commentary

CTCT

Updates to “active” status

“Active” status is applied when work completion paperwork is received, or meter reading data proves that an ICP is consuming energy. Workflows are used to transfer work completion paperwork details from ORB to SAP, including readings if one is available and a disconnection service order is also present. A status update is transferred from SAP to the registry overnight.

The timeliness of status updates to “active” for reconnections is set out in the table below:

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Active	2020	1,186	91.33%	4.17
	Jan 2021	928	91.01%	3.58
	Aug 2021	1,192	85.38%	3.87
	Apr 2022	1,019	85.86%	4.14
	Feb 2023	1,718	85.29%	4.92
	Dec 2023		1,507	85.66%

341 of the 1,507 late updates were made within ten business days of the event date, 914 were within 30 business days, and 1,414 were within 100 business days. The latest update was made 2,466 business days after the event date. I checked an extreme case sample of the ten latest updates (including all over 300 business days after the event date), and ten late updates which were made 30 to 100 business days after the event date. The updates were late because:

- they corrected incorrect statuses found through inactive status checks and other checks, including where the ICP had been reconnected by another party,
- they related to ICPs where there was no disconnection status record, and were found through validation and corrected, and
- one reconnection as part of a meter relocation was initially missed, and later updated.

The late “active” status updates checked were processed with the correct event date and statuses except for two ICPs which had incorrect event dates, and one ICP which had an incorrect status which were discovered and corrected during the audit.

Updates to “inactive” status

“Inactive” status is applied once a CTCT approved contractor has confirmed that the ICP has been disconnected, or a network advises that an ICP is “inactive - ready for decommissioning”. Workflows are used to transfer work completion paperwork details from ORB to SAP, including readings if available. A status update is transferred from SAP to the registry overnight.

The timeliness of status updates to “inactive” is set out in the table below:

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Inactive	2020	860	94.44%	5.43
	Jan 2021	649	94.51%	3.29
	Aug 2021	491	94.24%	6.19
	Apr 2022	435	94.84%	2.60
	Feb 2023	721	94.21%	3.12
	Dec 2023	785	93.62%	3.45

14 of the late updates were to “inactive - new connection in progress” status. CTCT do not use the “inactive - new connection in progress” status unless an ICP’s “active” date needs to be corrected to a later date, in which case the original “active” status update is replaced with an “inactive - new connection in progress” update. Updates to “inactive - new connection in progress” status are only considered to be late if they are made after the initial electrical connection date. 13 of the 14 late updates were genuinely late.

295 of the other 771 late updates were made within ten business days of the event date, 588 were within 30 business days, and 696 were within 100 business days. The latest update was made 2,372 business days after the event date. I checked an extreme case sample of the five latest or all late updates per status reason code. The updates were late because:

- they corrected incorrect statuses, including where a reconnection had been processed before the disconnection,

- paperwork was received late or there was late notice of a disconnection following cyclone damage,
- the update was delayed while switching activity was completed, because CTCT could not update the registry for periods where they were not the proposed trader, and
- the update was delayed while meter change activity was completed.

The late “active” status updates checked were processed with the correct event date and statuses except for one ICP which had an incorrect event date and status, which was corrected during the audit.

Trader updates

The timeliness of trader updates is set out on the table below.

Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2020	16,591	90.63%	5.21
Jan 2021	1,912	94.90%	5.05
Aug 2021	2,498	89.18%	6.06
Apr 2022	1,431	89.19%	5.79
Feb 2023	2,544	84.61%	7.69
Dec 2023	2,615	81.81%	10.28

908 late updates were made within ten business days of the event date, 2,045 were within 30 business days, and 2,381 were within 100 business days. The latest update was made 2,521 business days after the event date. The AC020 compliance report indicates which fields have been changed by the late update, but because the report ignores replaced and reversed records (which the late update may be replacing) in some cases different fields have changed.

I reviewed an extreme case sample of the late updates as described below:

Update type (if listed)	Number late	Maximum days after event date	Findings
ANZSIC	510	2521	I checked the five latest updates and found they were changes made as part of the decommissioning process.
MEP nomination	896	982	I checked the ten latest updates and found three were delayed by backdated switch withdrawals, and seven were backdated corrections to profiles to match submission data rather than MEP nominations.
Profile	627	2341	I checked the ten latest updates and found they were backdated corrections to profiles to match submission data.
Submission type and profile	396	1142	I checked the five latest updates and found they were backdated corrections to profiles and submission types to match submission data.

Update type (if listed)	Number late	Maximum days after event date	Findings
Unknown (blank)	96	1247	I checked the five latest updates. Four were corrections to MEP nominations, and one was a correction from RPS E11 to RPS E08 profile to match submission data.
Unmetered load addition	19	187	I checked the five latest updates and found they were profile corrections for HHR settled ICPs which also have NHH settled unmetered load and were not genuine unmetered load additions.
Unmetered load change	19	849	I checked the five latest updates and found four were profile corrections for HHR settled ICPs which also have NHH settled unmetered load and were not genuine unmetered load changes. ICP 0000180737HBA90 underwent a minor change to its daily unmetered kWh from 1.47 to 1.486 kWh per day from 3 September 2019 to resolve a historic rounding issue in the calculation. The impact on submission for the period that fell outside the 14-month revision window is under submission of approximately 14 kWh.
Unmetered load removal	52	1181	I checked the five latest updates and found one was a profile correction for a HHR settled ICP which also had NHH settled unmetered load and was not a genuine unmetered load change. The other four were genuine removals of unmetered load, where the backdated update occurred at the network's request when they changed the unmetered load details. ICP 0007159037RN857's unmetered load removal was backdated more than 14 months. The impact on submission for the period that fell outside the 14-month revision window is over submission of approximately 86 kWh.
Grand Total	2615	2521	

The late updates contained the correct event date and attributes except 0007206698RNF30, which became a metered supply on 15 November 2022 (during the previous trader's period of supply) and should have had its unmetered load removed by Contact from the switch in date, 4 December 2022. Instead, the unmetered load was removed from 9 January 2023. This still needs to be corrected and has resulted in over submission of 55.44 kWh between the switch in date and 8 January 2023.

169 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP. I checked a sample of the ten latest updates and found they were delayed by backdated switch ins or new connections.

I re-checked incorrect trader updates identified during the previous audit and found they had been corrected.

CTCS

CTCS checks late updates weekly using the AC020 audit compliance report. Any late updates are investigated to determine the reason for the late update and determine if corrective action is required for the update or to prevent recurrence of similar late updates. The outcome of the investigation is documented.

Updates to “active” status

ICP status is updated to “active” using the registry user interface once the correct status and status date are confirmed. Where available, an actual reconnection reading is entered into DataHub.

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

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Active	Jan 2021	11	71.05%	6.00
	Aug 2021	18	75.00%	7.63
	Apr 2022	4	90.00%	5.40
	Feb 2023	8	85.96%	11.11
	Dec 2023	6	85.71%	10.67

The six late updates for CTCS were made between seven and 295 business days after the event date because:

- they corrected incorrect statuses found through inactive consumption checks and MADRAS dashboard checks,
- they were reconnections for backdated switches, where the registry could not be updated until CTCS was listed as the trader on the registry, or
- paperwork confirming the reconnection was provided late.

The late updates all reflected the correct status and status date.

Updates to “inactive” status

ICP status is updated to “inactive” using the registry user interface once the correct status and status date are confirmed. Where available, an actual disconnection reading is entered into DataHub.

The timeliness of status updates to “inactive” is set out in the table below.

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Inactive	Jan 2021	2	75.00%	12.13
	Aug 2021	37	49.32%	34.49
	Apr 2022	10	72.22%	13.56
	Feb 2023	22	81.67%	18.43
	Dec 2023	23	81.89%	23.10

Two of the late updates were to 1,12 “inactive - new connection in progress” status, and were not genuinely late, because the update occurred prior to initial electrical connection.

I checked the 21 genuine late updates. Four were made within 30 business days of the event date and 14 were made within 100 business days of the event date. The latest update was made 594 business days after the event date. I checked an extreme case sample of the five latest or all late updates per status reason code, and found the late updates were caused by:

- corrections to incorrect statuses, status reasons or event dates identified through the MADRAS dashboard, investigations of stopped meters, expired meter certifications, missing AMI readings or notification of meter removal from meter readers, and
- late paperwork confirming the disconnection, or late notice of disconnections following cyclone damage.

The late updates were processed with the correct status and reason code and event attributes.

Trader updates

Trader updates including MEP nominations are updated using the registry user interface once the correct attributes and event date are confirmed. The timeliness of trader updates is set out on the table below.

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Trader	Jan 2021	29	43.14%	8.76
	Aug 2021	113	26.14%	4.31
	Apr 2022	63	87.27%	8.04
	Feb 2023	127	79.97%	13.37
	Dec 2023	94	76.38%	8.42

For CTCS, 18 late updates were made within ten business days of the event date, 67 were within 30 business days, and 89 were within 100 business days. The latest update was made 347 business days after the event date.

I reviewed an extreme case sample of the five latest updates (or all late updates) of each type as described below. The AC020 compliance report indicates which fields have been changed by the late update, but because the report ignores replaced and reversed records (which the late update may be replacing) in some cases different fields have changed.

Update type	Number late	Maximum days after event date	Findings
Profile	5	19	The five latest updates were corrections from RPS profile to RPS PV1 where distributed generation was added. When processing a meter change which added I flow, the step to update the profile was missed. The incorrect profiles were identified through validation processes.
Proposed MEP	16	151	The five latest updates were checked. Two backdated updates were requested by the MEP, two were delayed while withdrawals were completed, and one was a correction to a previous MEP nomination.

Update type	Number late	Maximum days after event date	Findings
Submission type and profile	68	130	The five latest updates were checked. One profile change was missed when processing a metering upgrade and was identified through pre-submission validation processes, the other four were corrections to NHH for HHR settled ICPs where regular readings were not being received.
Unmetered load	5	347	The five latest updates were corrections to unmetered load details following the last audit, or changes to the distributor's unmetered load details.
Total	94	347	

Further training has been provided to staff to ensure that profile and submission type changes are made promptly as part of the meter change process.

All of the late updates checked had the correct event date and attributes apart from ICP 0000174057TR9A9's 3 May 2023 MEP nomination, which was reversed as part of the business-as-usual process once the error was discovered.

Three ANZSIC code updates for CTCS were made more than 20 business days after CTCS began trading at the ICP because the ANZSIC code was updated as part of claiming a backdated new connection.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 3.3</p> <p>With: Clause 10 Schedule 11.1</p> <p>From: 12-Apr-23</p> <p>To: 12-Dec-23</p>	<p>CTCT</p> <p>1,507 late updates to "active" status.</p> <p>785 late updates to "inactive" status.</p> <p>2,615 late trader updates.</p> <p>169 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP.</p> <p>CTCS</p> <p>Six late updates to "active" status.</p> <p>23 late updates to "inactive" status.</p> <p>94 late trader updates.</p> <p>Three ANZSIC code updates were made more than 20 business days after CTCS began trading at the ICP.</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>

<p><u>CTCS</u></p> <p>Trader updates for Profiles HHR to RPS will more than likely always be a non-compliance as MEP's only update the Advanced Meter Flag when there's been 10 days of no reads received. As soon as the flag is updated Simply Energy updates the Profile.</p> <p>Simply Energy have identified more resource is needed in this space and as a result, are proactively training another member of the team to assist in this space which will ensure better data quality - Operations Team Lead is also acting as Quality Control.</p> <p>Simply Energy are also working with their internal system administrator to improve current process in Salesforce to assist with timing and actions and to provide the Operations Team Leader visibility to assist and/or add resource where required.</p>	<p><u>CTCS</u></p> <p>Aug 2024</p> <p>Dec 2024</p>	
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3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

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

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

Audit observation

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

Audit commentary

CTCT

Retailers Responsibility to Nominate and Record MEP in the Registry

MEP details are transferred from ORB to SAP once completion paperwork is received, and the SAP workflow creates an MEP nomination. Trader updates are transferred to the registry from SAP overnight. If the information required for the MEP nomination is incomplete or inconsistent with expected values for the fields in SAP a BPEM is created, and a user will update the required information so that the MEP nomination can be created. CTCT runs the “check NCGS nomination” databricks report weekly to identify MEP nominations for NGCS so that they can be corrected to NGCM.

MEP nominations for new connections are issued when the work is complete and the ICP moves to “active” status. Any late “active” status updates will also have late MEP nominations. If an MEP requests it, such as for FCLM triple saver meters, CTCT will create an MEP nomination directly on the registry at the time the service order is created.

Rejected and missing MEP nominations are identified through the BPEM process or enquiries from the MEP. 15,629 (99.93%) of the 15,640 MEP nominations identified on the event detail report were accepted. 11 MEP nominations were rejected, and then identified through the BPEM process and reissued. The rejected MEP nominations were issued because:

- the wrong MEP was recorded in the contractor’s work completion paperwork, due to an upcoming change to CTCT’s preferred MEP,
- the MEP rejected the nomination in error and later accepted, or
- the meter was installed automatically in SAP with the MEP TPCO (who was the meter owner during the previous period of supply) instead of TPCS.

All “active” metered ICPs have an MEP recorded. The audit compliance report recorded 98 “active” ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. 55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the registry after the report was run.

The audit compliance report identified six “new” ICPs which did not have an accepted MEP nomination within 14 business days. Three became metered after a period with an unmetered builder’s temporary supply and the MEP nominations were on time, and three invalidly appeared on the report and did have an MEP nomination made and accepted within 14 business days of the “active” date. ICP 0005265000ALF50 was a backdated new connection, and the MEP nomination was not processed until the ICP became “active”.

ICP Decommissioning

ICPs that are vacant and “active”, or “inactive” are still maintained in SAP.

Where decommissioning is required, CTCT raises a field services job for the MEP to collect their meter and the network to decommission. If the MEP cannot complete the job due to either the meter’s location or the urgency of the decommissioning, a job will be raised with Delta who are expected to advise the MEP and return the meter to them. Once work completion paperwork is received in ORB, the disconnection reads and status are transferred to SAP, which then updates the registry to “inactive - ready for decommissioning” status.

When an ICP is decommissioned, an attempt is made to read the meter at the time of removal. If this is not possible a permanent estimate reading is created.

A diverse sample of ten ICPs were examined, and an attempt to read the meter was made at the time of removal. Where an actual read could not be obtained for the disconnection date, a permanent estimate

read was entered. The MEP was notified of the decommissioning by issuing a service order for meter removal, except where the MEP had advised CTCT that the meter was already removed.

CTCS

Retailers Responsibility to Nominate and Record MEP in the Registry

CTCS creates MEP nominations for all MEPs when the ICP moves to “inactive - new connection in progress” status, or when a field services job is nominated. MN responses received from the registry are manually reviewed and actioned daily, and Salesforce cases are raised to monitor meter and MEP changes in progress.

The audit compliance report recorded six “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 had an MEP nomination made and accepted and were awaiting meter asset data.

The audit compliance report did not identify any new connections where an MEP nomination was not accepted within 14 business days.

All 235 MEP nominations identified on the event detail report were accepted.

ICP Decommissioning

ICPs that are vacant and “active”, or “inactive” are be maintained in Salesforce, DataHub and MADRAS.

The normal policy is to arrange for the meter(s) to be removed once decommissioning is confirmed and return the meter(s) to the MEP. The MEP is notified as part of the service order if they are to remove the meters, or through the registry status update and return of the meters if the service order is completed by Wells.

When an ICP is decommissioned, an attempt is made to read the meter at the time of removal. If this is not possible a permanent estimate reading is created.

A diverse sample of ten ICPs were examined, and an attempt to read the meter was made at the time of removal. Where an actual read could not be obtained for the disconnection date, a permanent estimate read was entered into DataHub and MADRAS. The MEP was notified of the decommissioning by issuing a service order for meter removal, except where the MEP had advised CTCS of the pending decommissioning.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.4 With: Clause 11.18 From: 21-Nov-23 To: 06-Dec-23	<p>CTCT</p> <p>0005265000ALF50 was a backdated new connection, and the MEP nomination was not processed until the ICP became “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>The controls are strong, because late MEP nominations are rare and there are robust processes in place to identify rejected MEP nominations.</p> <p>The impact is low, the MEP nomination was made on 6 December 2023 for 21 November 2023.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Contact maintains a robust process for managing MEP nominations. However, the nomination for ICP 0005265000ALF50 encountered a delay due to initial uncertainty regarding the involvement of an alternate retailer in the new connection for the customer. Upon receiving confirmation, the ICP was promptly established, and the nomination was swiftly forwarded to the registry.</p>		<p><u>CTCT</u></p> <p>December 2023</p>	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
No further actions required.			

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

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

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

Audit observation

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

Audit commentary

CTCT

New connection timeliness

CTCT claims ICPs at “active” status once electrical connection has occurred. MEP nominations will be late for any ICPs not updated within the required timeframe. All new connections during the audit period were for NHH ICPs.

The timeliness of status updates to “active” for new connections is set out on the table below.

Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
2020	1,083	82%	5.4
Jan 2021	306	92.64%	3.35
Aug 2021	195	94.22%	5.05
Apr 2022	131	94.64%	2.83
Feb 2023	503	88.58%	3.44
Dec 2023	289	93.94%	3.61

149 of the 289 late updates were made within ten business days of the event date, 247 were within 30 business days, and 271 were within 100 business days. The latest update was made 455 business days after the event date. I checked an extreme case sample of the 20 latest updates and found they were delayed by:

- date corrections, where the “active” status date was found to be incorrect,
- late connection paperwork, or incorrect connection paperwork which required investigation before SAP and the registry could be updated,
- one ICP had a builder’s temporary connection which did not trigger an automatic SAP status update and was found when moving the ICP from a temporary to permanent connection; updates may fail to trigger for a combination of reasons, including the ORB docket information failing to be transferred to SAP, and the failure not being captured by exception reports, and
- for ten ICPs in one new development, connections were completed without an open service order in ORB; the original job could not be completed because the installation was not ready and the customer asked for the connection to be completed in seven months so CTCT closed the ORB service order and raised another seven months later, but found the MEP had left the original service order open and completed the connection two months after the original attempt to connect, but no paperwork was provided to CTCT.

The late updates were processed with the correct status and connection date.

New connection information accuracy

The status of an ICP is only changed to “active” once confirmation of connection has been received by a contractor. Workflows are used to transfer work completion paperwork details from ORB to SAP, including readings if available. A workflow will be generated for a user if SAP cannot find the correct

service order number or information is missing. A user manually checks the paperwork and/or confirms the missing details with the contractor before updating SAP.

Databricks combines a registry list of ICPs at “new” and “ready” status with CTCT as the proposed trader with registry ICP information including the initial electrical connection date, ORB service order information, and SAP customer contract information to create a daily new connection breach report. The report is shared with the operations and switching teams to identify ICPs which may have been connected but paperwork has not been received and/or paperwork has been received but SAP and the registry have not been updated. Each ICP is reviewed to determine any action required.

CTCT has temporarily stopped its process to validate “active” status dates against the meter certification date and initial electrical connection date. A recommendation to resume the validation is made in **section 2.9**.

The AC020 audit compliance report identified 50 ICPs with an initial electrical connection date populated which had not been made “active”:

- 42 ICPs were updated to “active” status from the initial electrical connection date after the report was run, and
- eight ICPs remain at “ready” status and are believed not to be connected as according to ORB no connection jobs have been raised or successfully completed and ICP 0000515234DE20E is believed to be no longer required; CTCT will confirm this before arranging for the ICP to be decommissioned.

I re-checked previous audit exceptions and found they have been correctly moved to “active” status apart from 1002150796LC3BD which is still believed not to have been connected.

Active dates for new connections were compared to the distributor’s initial electrical connection date (IECD), and MEP’s certification date (MCD) using the AC020 audit compliance report which identified 780 ICPs with date discrepancies. 41 unmetered ICPs had an “active” date consistent with the initial electrical connection date and were confirmed to be correct. I checked a sample of 43 of the remaining 753 exceptions as shown in the table below.

Findings	Quantity	Sample size	Number in sample incorrect
IECD = active date and MCD ≠ active date	4	4	1
IECD ≠ active date and MCD = active date	32	5	-
IECD ≠ active date and MCD ≠ active date	4	4	-
IECD = active date and no MCD	78	5	-
IECD ≠ active date and no MCD	3	3	-
IECD = active date and unmetered	41	5	-
IECD ≠ active date and unmetered	8	5	2
No IECD and MCD = active date	561	2	-
No IECD and MCD ≠ active date	2	5	-
No IECD and no MCD	37	5	1

Findings	Quantity	Sample size	Number in sample incorrect
Total	753	43	4

Connection dates for 11⁵ of the sample of 43 ICPs are under investigation to confirm the correct connection date. If the date is found to be incorrect an update will be processed in SAP and the registry.

Two of the four discrepancies were corrected as soon as they were identified and revised submission data will be provided at the next available opportunity. The other two ICPs with incorrect “active” status dates have not been corrected as soon as practicable.

ICP	Recorded Status Event Date	Correct Status Event Date	Exception type
0007214719RN49A	21 April 2023	20 April 2023	IECD ≠ active date and unmetered
0000515434DE408	12 September 2023	8 September 2023	IECD ≠ active date and unmetered

13 new connections found to have incorrect “active” status dates during the previous audit have either not been corrected, or not corrected in both SAP and the registry. The ICP details are recorded in **appendix 15.3**, and non-compliance is recorded in **sections 2.1 and 2.2**.

ANZSIC code population

169 ANZSIC code updates were made more than 20 business days after CTCT began trading at the ICP. I checked a sample of the ten latest updates and found they were delayed by backdated switch ins or new connections.

CTCS

New connection timeliness

New connection information is entered into Salesforce and a case is created to manage the new connection workflow, and Outlook and spreadsheets are also used for monitoring. The Salesforce case remains open until the new connection job is completed, and Salesforce, DataHub, the registry, and MADRAS (if NHH settled) are updated.

CTCS completes MEP nominations when ICPs are moved to 1,12 “inactive - new connection in progress” status, and MEP nominations are usually made on time where status updates are late.

The timeliness of status updates to “active” for new connections is set out on the table below.

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
Active	Jan 2021	5	16.67%	22.33
	Aug 2021	27	27.03%	16.49
	Apr 2022	19	26.92%	15.23

⁵ 0007214529RN965 5 August 2023, 1002182804UN6D5 11 August 2023, 0007214736RN611 6 April 2023, 0007214825RNF73 2 April 2023, 0007216715RN4C4 7 August 2023, 0110013746EL004 26 May 2023, 0000011179TEFE1 29 June 2022, 0010000904TEE20 3 November 2022, 0110013685EL22F 1 June 2023, 1099584202CN5B1 1 September 2023, and 0000515367CE1D9 23 August 2023.

Status	Review period end	ICPs notified greater than five days	Percentage on time	Average Business Days between Status Event and Status Input Dates
	Feb 2023	18	71.43%	13.16
	Dec 2023	14	80.28%	8.2

Seven of the 14 late updates were made within ten business days of the event date, 12 were within 30 business days, and 13 were within 100 business days. The latest update was made 223 business days after the event date. I checked an extreme case sample of the ten latest updates and found they were caused by:

- corrections following investigation of date discrepancies identified through validation processes,
- late receipt of connection paperwork or delays in confirming the correct connection attributes, including situations where the previous retailer had initially requested the connection, and
- late processing of updates.

All of the late updates had the correct status and event date applied.

Two of the late updates also had late MEP nominations because the ICP was not claimed until it after they became “active”. The delays were caused by backdated notice of the new connection start date, and/or delays entering into a contract with the customer.

New connection information accuracy

The accuracy of “active” status dates was checked using the AC020 audit compliance report.

The AC020 audit compliance report identified one ICP with an initial electrical connection date populated which had not been updated to “active” status. The ICP was moved back to “ready” status with an unknown trader after the report was run.

Active dates for new connections were compared to the distributor’s initial electrical connection date (IECD), and MEP’s certification date (MCD) using the AC020 audit compliance report which identified 24 ICPs with date discrepancies. One unmetered ICP had an “active” date consistent with the initial electrical connection date and was confirmed to be correct. I checked a sample of 18 of the remaining 23 exceptions as shown in the table below and no exceptions were identified.

Findings	Quantity	Sample size	Number in sample incorrect
IECD = active date and MCD ≠ active date	2	2	-
IECD ≠ active date and MCD = active date	1	1	-
IECD ≠ active date and MCD ≠ active date	1	1	-
IECD = active date and no MCD	4	4	-
No IECD and MCD = active date	10	5	-
No IECD and no MCD	4	4	-
No IECD and unmetered	1	1	-
Total	23	18	-

<p>We continue to review all these areas for improvement opportunities.</p> <p>Where errors or delays are identified as stemming from data entry errors, procedural inconsistencies, or system-related issues, we continue to review those areas to make improvements.</p> <p>Where errors or delays are identified as stemming from paperwork-related delays and errors from the field. These instances will continue to be addressed via the contractor performance provisions within the respective agreements.</p> <p>Ongoing training will continue to be provided to staff as required.</p> <p>Contact is currently in the process of migrating existing ANZSIC code reporting from SAS to Data Bricks. This migration aims to integrate the current ANZSIC code reporting into the EMT currently under development and testing.</p> <p><u>CTCS</u></p> <p>Late updates cannot be corrected. Simply Energy continues to review the ANZSIC codes of ICPs that switch in from other traders to get them as accurate as possible, which includes periodic reviews of all ICPs. Sometimes this will mean an ANZSIC code is updated weeks after switching an ICP where the business believes the coding can be improved - as discussed with the auditor, Simply Energy are prioritizing accuracy over timeliness.</p>	<p><u>CTCS</u></p> <p>N/A</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Contact has robust processes and reporting in place to monitor the completeness and timeliness of updates to the Registry.</p> <p>We currently have several mechanisms and initiatives noted in our audit responses that will help identify room for improvements within our processes and reporting, monitor discrepancies and trends, as well as improve our overall compliance rating.</p> <p><u>CTCS</u></p> <p>Simply Energy have identified more resource is needed in this space and as a result, are proactively training another member of the team to assist in this space which will ensure better data quality - Operations Team Lead is also acting as Quality Control</p> <p>Monthly reports are sent to Operations where the ANZSIC code requires further investigation for existing ICP's - the Operations</p>	<p><u>CTCT</u></p> <p>Ongoing</p> <p><u>CTCS</u></p> <p>Aug 2024</p> <p>Ongoing</p>	

Team works closely with the Customer Care Team to provide the correct codes and the Registry is updated as soon as an improved code is confirmed.		
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3.6. ANZSIC codes (Clause 9 (1(k) of Schedule 11.1)

Code reference

Clause 9 (1(k) of Schedule 11.1

Code related audit information

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

Audit observation

The process to capture and manage ANZSIC codes was examined. The registry list and AC020 audit compliance reports were reviewed and ANZSIC codes were validated for a sample of ICPs.

Audit commentary

CTCT

Contact captures an ANZSIC code for all new connections and the CSR is required to verify the ANZSIC code on customer applications. ANZSIC codes are validated monthly using SAS and databricks reports which identify ICPs where either the registry and SAP ANZSIC codes are inconsistent, the billing class is inconsistent with the ANZSIC code, and ICPs with T99 series ANZSIC codes.

The AC020 audit compliance report was reviewed to identify ANZSIC code exceptions:

Issue	Dec 2023	Feb 2023	Apr 2022	Aug 2021	Jan 2021	2020
Active ICPs with blank ANZSIC codes	-	-	-	-	-	-
Active ICPs with ANZSIC "T994" or "T994000" don't know	3	5	2	3	43	1
Active ICPs with ANZSIC "T997 "response unidentifiable	-	-	-	-	-	-
Active ICPs with ANZSIC "T998 "response outside of scope	-	-	-	-	-	-
Active ICPs with ANZSIC "T999" or "T999999" not stated	-	-	-	-	4	-
Active ICPs with metering category two or above with a residential ANZSIC code	29	22	26	22	16	-

All exceptions were checked:

- the three ICPs with unknown ANZSIC codes were corrected to residential during the audit, and
- 26 of the 29 category two ICPs with residential ANZSIC codes had the correct code applied, and the other three were corrected during the audit.

I checked a sample of 100 ICPs with the ten most frequently applied codes by checking Google Street View and registry property name information. Customer industry information held by CTCT was checked for any ICPs where I could not validate the ANZSIC code using the registry and Google Street View. 92 had the correct ANZSIC code, and six were corrected during the audit. Two ICPs still have incorrect ANZSIC codes:

ICP	Applied code	Expected code
0000000153TE964	S95 - Personal and Other Services	S960 – Private household employing staff
0000804273WP44B	000000 - Residential	S960 – Private household employing staff

CTCS

ANZSIC codes are provided as part of the application process, and validated on switch in. Account Managers advise the switching team if they believe the customer’s existing ANZSIC code is incorrect and should be updated.

ANZSIC codes are validated:

- The Salesforce Dashboard reports on ICPs which have T9 series unknown ANZSIC codes, and L671 property operator ANZSIC codes indicating that they are vacant. These exceptions are reviewed at least monthly.
- The AC020 audit compliance report is reviewed fortnightly to identify ICPs with meter category two or higher and residential ANZSIC codes to confirm whether they are accurate.
- The Head of Pricing and Risk reviews ANZSIC codes for reasonableness including ICPs where the ANZSIC code is inconsistent with the network pricing code. Exceptions are passed to the operations team for investigation and correction fortnightly. As time allows ICPs with each ANZSIC code are being checked for consistency with the customer’s name, and any exceptions are investigated.

The AC020 audit compliance report was reviewed to identify ANZSIC code exceptions:

Issue	Dec 2023	Feb 2023	Apr 2022	Aug 2021	Jan 2021
Active ICPs with blank ANZSIC codes	5	-	-	-	-
Active ICPs with ANZSIC “T994” or “T994000” don’t know	-	-	-	2	-
Active ICPs with ANZSIC “T997” response unidentifiable	-	-	-	-	-
Active ICPs with ANZSIC “T998” response outside of scope	-	-	-	-	-
Active ICPs with ANZSIC “T999” or “T999999” not stated	-	-	-	-	-
Active ICPs with metering category two with a residential ANZSIC code	1	-	-	2	1
Active ICPs with metering category three with a residential ANZSIC code	1	-	-	1	-

The five ICPs with blank ANZSIC codes are all residual load ICPs and there is no industry code, and the category two and three ICPs are confirmed to be residential.

I checked a sample of 40 ICPs with the ten most frequently applied codes by checking Google Street View and registry property name information. Customer industry information held by CTCS was checked for any ICPs where I could not validate the ANZSIC code using the registry and Google Street View. All had the correct ANZSIC code applied.

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: 07-Dec-23</p> <p>To: 28-Feb-2024</p>	<p>CTCT</p> <p>14 ICPs had an incorrect ANZSIC code applied, and 12 were corrected during the audit.</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 overall but there is room for improvement. Some exceptions relating to unknown ANZSIC codes and meter category two ICPs were not identified prior to the audit.</p> <p>The audit risk rating is low because there is no impact on settlement outcomes and a low impact on the Electricity Authority's reporting accuracy.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>The ANZSIC code for ICP 0000000153TE964 is still under investigation.</p> <p>Contact is currently in the process of migrating existing ANZSIC code reporting from SAS to Data Bricks. This migration aims to integrate the current ANZSIC code reporting into the EMT currently under development and testing.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Please refer to actions taken to resolve section.			

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 AC020 audit compliance reports and registry lists were examined to identify any ICPs where there were discrepancies between Contact's unmetered load information and distributor information.

Audit commentary

CTCT

CTCT supplies 875 ICPs with unmetered load recorded by the distributor. 292 ICPs have shared unmetered load and 583 ICPs have standard unmetered load.

SAP holds two fields for the unmetered daily kWh, one for reconciliation and one for billing, which are independent. This enables settlement corrections to be processed without reversing and rebilling invoices. It is the reconciliation value that is validated against the registry. Standard unmetered load corrections can be processed in SAP and will flow through to reconciliation submissions.

New connections of unmetered load

All unmetered load new connections or capacity changes require an application to CTCT, which then follows the new connection process, including a check to confirm whether the ICP should be metered and the daily unmetered kWh.

Monitoring of unmetered load

A BPEM is generated when an ICP switches in with unmetered load details, so that they can be checked and updated as necessary.

Changes to distributor unmetered load are also monitored through the BPEM process:

- an IE11 BPEM is created when a distributor adds new unmetered load details,
- an IE22 BPEM is created when a distributor changes unmetered load details, and
- an IE19 BPEM is created when a distributor changes their pricing category information because some distributors have separate codes for unmetered load; these changes can coincide with addition or removal of unmetered load.

As recorded in the previous three audits, BPEMs are not consistently generated where unmetered load details are removed. CTCT has not developed a new BPEM to capture unmetered load removals because they have found it is identified through monthly databricks reporting which identifies:

- ICPs with SAP unmetered load details and no distributor unmetered load details, and
- ICPs where the unmetered flag is no and no meter is present, which are checked against MEP nominations to determine whether a meter installation is underway before any remaining exceptions are followed up to determine whether unmetered load should be recorded.

Accuracy of unmetered load

Distributor and trader unmetered load details for the standard unmetered load ICPs were compared using the AC020 audit compliance report and registry list. The table below lists the discrepancies found.

Issue	Dec 2023 ICPs	Feb 2022 ICPs	Apr 2022 ICPs	Comments
Daily kWh difference more than 1.0 kWh per day from the distributor unmetered load details	3	1	-	ICP 0007302943NV9C had a failed correction to unmetered load details effective from 20 June 2023, which was reprocessed during the audit on 12 January 2024. ICP 0000039959NT2B2 had an unmetered load calculation error resulting in 7.13 kWh per day instead of 0.713 kWh per

Issue	Dec 2023 ICPs	Feb 2022 ICPs	Apr 2022 ICPs	Comments
				day. A correction was processed during the audit on 11 January 2024 effective from 23 May 2023. ICP 0000054545HR357 had correct trader unmetered load information and the distributor has updated the “on” hours.
Daily kWh difference more than 0.1 kWh per day from the distributor unmetered load details	6	3	3	In addition to ICPs 0007302943NV9C, 0000039959NT2B2 and 0000054545HR357 above, ICPs 0000020828WE426 and 0067025054WE352 had unmetered load calculation errors which were corrected in SAP and the registry upon discovery during the audit. Revised submission data will be provided through the wash up process. ICP 00010000689TEB3E had an unmetered load calculation error, which was corrected in SAP to 0.408 kWh but is still to be corrected on the registry.
CTCT’s load value is different to that of their load description by more than 0.1 kWh	-	1	10	Compliant.
Trader’s unmetered load field is populated but the Distributor has none	21	23	46	CTCT’s unmetered load details were confirmed to be correct for 18 ICPs, and two ICPs had their trader unmetered load details removed after the report was run. ICP 0007211755RN201 had its unmetered temporary supply removed before switching to CTCT but the previous trader had not updated the registry. CTCT inherited the unmetered load details, which they removed during the audit.
Distributor’s unmetered field is populated but the retailer field is not populated	8	2	6	For six ICPs there is no unmetered load, and the network has updated or will update their unmetered load details. ICPs 0006862063RN63D and 0000370482TU3CE have unmetered load, and CTCT updated their unmetered load details during the audit. Both ICPs switched in from a previous trader with no trader unmetered load details recorded.
Unmetered flag = Y but daily unmetered kWh = 0	1	1	-	The trader unmetered load details for 0005075319RNEC9 indicate that the unmetered load is not connected/not working, and the customer has confirmed this. CTCT is working with the customer to confirm whether repairs will be carried out or the unmetered flag and trader details should be removed.

I found that ten ICPs had incorrect unmetered load details recorded, and nine were corrected upon discovery of the error during the audit. The following unmetered load exceptions were not resolved as soon as practicable.

ICP	Exception
0010000689TEB3E	An error was made calculating the shared unmetered load, which was corrected in SAP during the audit, but is still to be corrected on the registry. Because SAP was updated, revised submission data was provided at the next available opportunity.
0007206698RNF30	When checking late trader updates in section 3.3 , I found ICP 0007206698RNF30 became a metered supply on 15 November 2022 (during the previous trader’s period of supply) and should have had its unmetered load removed by CTCT from the switch in date, 4 December 2022. Instead, the unmetered load was removed from 9 January 2023. This still needs to be corrected and has resulted in over submission of 55.44 kWh between the switch in date and 8 January 2023.

I rechecked previous audit unmetered load exceptions and confirmed that they had been cleared except for ICP 0000018605WECOF, which switched out before it could be corrected.

Meter category nine or blank with no unmetered load recorded

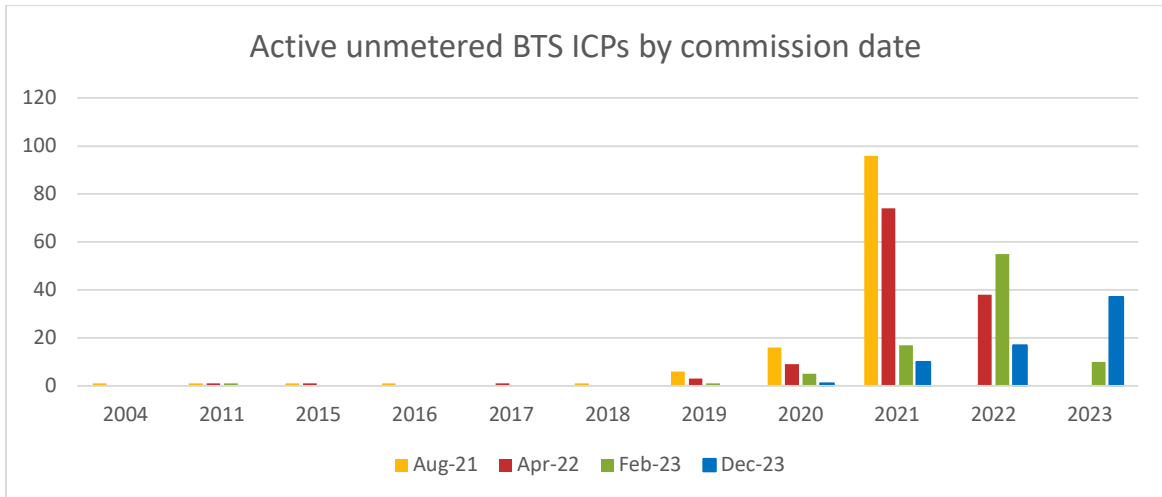
All “active” metered ICPs have an MEP recorded. The audit compliance report recorded 98 “active” ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. 55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the registry after the report was run.

Unmetered builders’ temporary supplies (BTS)

Previously CTCT has written letters to the customers at long term “active” BTS supplies, in an attempt to arrange metering if the ICP is still required or decommissioning if it is not. The last round of letters was issued in 2022, and CTCT have continued to work towards metering or decommissioning long term unmetered BTS ICPs. When workloads allow, CTCT plans to issue another round of letters.

CTCT have found that Orion often creates a new metered ICP when a BTS becomes permanent, rather than adding metering to the existing unmetered BTS ICP. This makes it more difficult for CTCT to identify redundant BTS ICPs which can be decommissioned.

The chart below shows the number of “active” unmetered BTS ICPs by commission date for the last four audit periods. This shows that the older ICPs are being investigated and moved to decommissioned status if they are no longer required or becoming permanent metered ICPs.



I checked the 15 oldest BTS ICPs including all commissioned in July 2022 or earlier. Three were decommissioned after the report was run, and one has been moved to “inactive - ready for decommissioning” status. The other 11 ICPs have “active” status:

- eight are to be decommissioned, including three where the distributors property name indicates that it is an “unmetered temporary supply decommissioned” and one where CTCT believes the ICP had already been decommissioned by another party,
- ICP 0000512384DEDD8 is confirmed to be still in use, but not ready to move to a metered permanent supply, and
- Contact is trying to make contact with the customers for 0007195872RN880 and 0007204007RNA4F.

CTCS

CTCS supplies 50 ICPs with unmetered load recorded by the distributor. 35 ICPs have standard unmetered load and 15 ICPs have distributed unmetered load.

CTCS manages unmetered volumes using dummy unmetered load meter registers. They have created a spreadsheet containing all unmetered load ICPs and the daily unmetered kWh. A formula is used to calculate readings for the unmetered load meter registers as the previous reading + (daily unmetered kWh x the number of “active” days in the month) to three decimal places. The file takes into account aggregation factor changes, so that changes can occur on a reading. The calculated readings are formatted into a REA (read file) format and imported into DataHub monthly and then transferred to MADRAS once validated. MADRAS applies a default estimate of 42 kWh per day where readings are not provided. I walked through the process from calculation of reads to entry into DataHub and MADRAS.

Monitoring of unmetered load

New unmetered load ICPs will be identified through the Salesforce dashboard’s MADRAS workflow checks because a new unmetered load dummy register will need to be created. When distributor unmetered load details change, Salesforce creates a case. The unmetered load details are checked and updated as necessary.

Fortnightly the Head of Pricing and Risk provides the compliance teams lists of new unmetered ICPs gained, changes to trader or distributor unmetered load details, and unmetered ICPs lost since her last update. These lists are created by analysing registry list information and are reviewed to ensure that the unmetered load is set up correctly in DataHub, MADRAS, and the unmetered ICPs spreadsheet, and the values are recorded correctly.

The AC020 audit compliance report is reviewed at least fortnightly to identify any “active” ICPs with a metering category which is nine or blank.

Accuracy of 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 for CTCS. A sample were checked, and I did not find any instances where the CTCS information was incorrect.

Issue	Dec 2023 ICPs	Feb 2022 ICPs	Apr 2022 ICPs	Aug 2021 ICPs	Jan 2021 ICPs	Comments
Daily kWh difference more than 0.1 kWh per day	5	6	11	11	1	All are DUML ICPs where CTCS has applied zero daily unmetered kWh.
Daily kWh difference more than 1.0 kWh per day	5	6	11	11	1	

Issue	Dec 2023 ICPs	Feb 2022 ICPs	Apr 2022 ICPs	Aug 2021 ICPs	Jan 2021 ICPs	Comments
Trader's unmetered load field is populated but the distributor has none	32	33	36	31	28	20 are DUMML ICPs, nine are residual load ICPs. 0000005114CE771 and 0000021564CE160 are being queried with the customer to confirm whether unmetered load is present and if so, the correct load. ICP 0001982631TG4C3 is set up for remote control of dimming for DUMML streetlights and is not currently in use. The network has required CTCS to move the ICP to "active" status so that they can be billed for line charges although no load is connected. Trader unmetered load information will be populated by CTCS once load is connected.
CTCS' load value is different to that of their load description by more than 0.1 kWh	-	-	-	-	4	Compliant.
Distributor's unmetered field is populated but the retailer field is not populated	-	-	-	-	-	Compliant.
Unmetered flag = Y but daily unmetered kWh = 0	39	37	8	4	5	29 are DUMML ICPs which are reconciled via a database therefore the registry kWh figure is not used. Nine are residual load ICPs, and zero is correctly recorded. ICP 0001982631TG4C3 is set up for remote control of dimming for DUMML streetlights and is not currently in use. The network has required CTCS to move the ICP to "active" status so that they can be billed for line charges although no load is connected. Trader unmetered load information will be populated by CTCS once load is connected.

The previous audit recommended CTCS check "on" hours with the distributors to ensure that they are correct. CTCS reviewed the registry listed "on" hours for their unmetered ICPs connected to each network and queried the values with the distributors. "On" hours were updated where the distributor advised the existing value was incorrect, and CTCS have created a Confluence page confirming the correct "on" hours for each network.

Meter category nine or blank with no unmetered load recorded

The audit compliance report recorded six “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 had an MEP nomination made and accepted and were awaiting meter asset data.

Unmetered BTS

There is one “active” BTS ICP supplied (0007198995RNCD4), and CTCS confirmed with their customer that the ICP is still required, and a permanent connection is unlikely to be required for 18 months.

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: 01-Apr-23</p> <p>To: 28-Feb-24</p>	<p>CTCT</p> <p>11 ICPs had incorrect unmetered load details recorded. Nine were corrected as soon as practicable once the error was identified and revised submission information was provided at the first available opportunity.</p> <p>Two remain incorrect in SAP and/or the registry.</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 currently rated as moderate, because there are good validation processes, but some exceptions were not resolved before being found during the audit.</p> <p>The audit risk rating is low because the impact on settlement is minor, and revised submission information will be washed up.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Contact have corrected 9 of the 11 ICPs identified as having incorrect UNM load details in the Registry and are working to validate and resolve the remaining two.</p> <p>Contact has developed a new EMT capable of identifying UML exceptions. We are providing further training to our users for this tool to ensure the tool is used proficiently, with an emphasis placed on accurate UML calculations and precise data entry into SAP.</p>	<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Identified</p>

Preventative actions taken to ensure no further issues will occur	Completion date	
Please refer to actions take to resolve section.		

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

Code reference

Clause 17 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The new connection and reconnection processes were examined, and compliance was assessed using the AC020 audit compliance, registry list and event detail reports.

The timeliness and accuracy of data for new connections is assessed in **section 3.5**, and the timeliness of data for reconnections is assessed in **section 3.3**.

Audit commentary

CTCT

The status of an ICP is only changed to “active” once confirmation has been received by a contractor, and/or consumption has been confirmed using meter readings. Workflows are used to transfer work completion paperwork details from ORB to SAP, including readings if available. A workflow will be generated for a user if SAP cannot find the correct service order number or information is missing. A user manually checks the paperwork and/or confirms the missing details with the contractor before updating SAP.

If there is no SAP disconnection service order because 1) the ICP has switched in with “inactive” status or 2) the disconnection paperwork is not received until after the subsequent reconnection paperwork, there will be no disconnection entry for the reconnection to match against in SAP. These issues should be identified through BPEMs, or the inactive consumption process.

CTCT ensures that any ICPs with “active” status have only one customer, embedded generator, or direct purchaser, and that the electricity consumed is quantified by a metering installation(s) unless un-metered load is recorded, or an exemption is in place which allows submission by subtraction.

The previous audit found that jobs including new connections which could not be completed by contractors were sometimes automatically closed by the robot, and CTCT would lose visibility of the job. Contact relies on contractors selecting the FWR (further work required) option when providing their paperwork so that another job can be raised. Incomplete new connections will also be identified through CTCT’s monitoring of ICPs at “new” and “ready” status, because ICPs are not claimed on the registry until they are “active”.

Accuracy of status updates for reconnections

I checked a sample of 20 reconnections, which were processed with the correct event date and statuses except for two ICPs which had incorrect event dates and one ICP which had an incorrect status which were discovered and corrected during the audit.

When reviewing potential late meter certifications for reconnections I found ICP 0000434474TPA6A had an incorrect update to “active” status on 4 December 2022 because a misread was supplied by the meter reader. It should have had “inactive” status throughout and has not been corrected.

Accuracy of status updates for new connections

Databricks combines a registry list of ICPs at “new” and “ready” status with CTCT as the proposed trader, with registry ICP information including the initial electrical connection date, ORB service order information, and SAP customer contract information to create a daily new connection breach report. The report is shared with the operations and switching teams so that ICPs which require claiming on the registry and status changes, can be investigated and have their status updated if necessary.

CTCT has temporarily stopped its process to validate “active” status dates against the meter certification date and initial electrical connection date, so may not be able to easily identify temporary electrical connections. A recommendation to resume the validation is made in **section 2.9**.

The accuracy of new connection updates was checked in **section 3.5**:

- four incorrect “active” dates were identified in a sample of 43 ICPs with date discrepancies; two were corrected as soon as they were identified and revised submission data will be provided at the next available opportunity but the other two ICPs with incorrect “active” status dates have not been corrected as soon as practicable (the ICP details are recorded in **appendix 15.3**), and
- 13 new connections found to have incorrect “active” status dates during the previous audit have either not been corrected, or not corrected in both SAP and the registry (the ICP details are recorded in **appendix 15.3**), and non-compliance is recorded in **sections 2.1** and **2.2**.

CTCS

The status of an ICP is only changed to “active” once confirmation has been received by a contractor, and/or consumption has been confirmed using meter readings.

CTCT ensures that any ICPs with “active” status have only one customer, embedded generator, or direct purchaser, and that the electricity consumed is quantified by a metering installation(s) unless un-metered load is recorded using a dummy meter register.

Accuracy of status updates for reconnections

I checked a sample of ten reconnections and confirmed that the correct “active” date and status was applied to all ICPs.

Accuracy of status updates for new connections

As discussed in **section 3.5**, the AC020 audit compliance report identified 23 ICPs with genuine date discrepancies. All were examined and a sample of 18 ICPs were checked and confirmed to have the correct status date applied.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 3.8</p> <p>With: Clause 17 Schedule 11.1</p> <p>From: 04-Dec-22</p> <p>To: 08-Dec-23</p>	<p>CTCT</p> <p>0000434474TPA6A had an incorrect status update to “active” on 4 December 2022 which has not been corrected.</p> <p>Two reconnected ICPs which had incorrect event dates and one ICP which had an incorrect status which were corrected during the audit.</p> <p>Four of a sample of 43 ICPs with “active” date discrepancies had incorrect “active” status dates. Two were corrected during the audit and two remain incorrect.</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 currently rated as moderate, because there are good validation processes, but some exceptions were not identified and resolved before being found during the audit.</p> <p>The audit risk rating is low because the impact on settlement is minor, and a small number of ICPs were non-compliant. Late or inaccurate changes to “active” can result in delays in providing submission information and billing the customer, and incorrect “active” dates can have an impact on submission data.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>0000434474TPA6A - A meter reader misread the clock meter during a read run, which indicated site was consuming despite holding a status of inactive in the registry. Subsequently, a BPEM was created to notify Contact of recorded consumption on an inactive site, the incorrect validation steps were completed, resulting in the Registry being incorrectly updated with a status of active. This has since been corrected in our system and the registry.</p> <p>Contact utilizes parts of the AC020 audit compliance report to monitor the accuracy of status event dates loaded in the Registry. We intend to expand training to our staff to ensure consistent oversight and timely corrections.</p> <p>Additionally, efforts are underway to address and resolve the remainder of the data inaccuracies highlighted during the audit.</p> <p>New Connections undergo daily monitoring via existing reporting. Furthermore, we utilize a monthly report to identify all connection disparities between the registry and SAP. These monitoring processes/reports are integral to ensuring data integrity and compliance.</p>		<p><u>CTCT</u></p>	<p>Identified</p>

Contact continues to work with field contractors and MEPs to address all late paperwork and accuracy issues returned from the field.		
Preventative actions taken to ensure no further issues will occur	Completion date	
<p><u>CTCT</u></p> <p>We will continue to work with our field service providers to ensure accurate paperwork is returned in a timely manner to further reduce the opportunity for this non-compliance to arise in the future.</p> <p>In addition, we will continue to run existing reporting, and explore opportunities for process and report improvements to further decrease the opportunity for non-compliances to arise in the future.</p>	<p><u>CTCT</u></p> <p>Ongoing</p>	

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The disconnection process and ICPs at “inactive” statuses were examined. Compliance was assessed using the AC020 audit compliance, registry list and event detail reports. The timeliness of updates to “inactive” statuses is detailed in **section 3.3**.

Audit commentary

CTCT

Management of “inactive” status

“Inactive” status is only used once a CTCT approved contractor has confirmed that the ICP has been disconnected, except for some ICPs at “inactive - ready for decommissioning” status which are confirmed to be ready for decommissioning by the network.

Workflows are used to transfer work completion paperwork details from ORB to SAP, including readings if available. A workflow will be generated for a user if SAP cannot find the correct service order number or information is missing, such as readings or dates. A user manually checks the paperwork and/or confirms the missing details with the contractor before updating SAP.

ICPs are not automatically updated to “active” status if they switch in with an “inactive” status. Their existing status is applied when they switch in, and if reconnected their status is changed once paperwork is received.

Inactive – new connection in progress status accuracy

CTCT does not use the “inactive - new connection in progress” status for the new connections unless a correction to the “active” status date is required. One ICP is correctly at “inactive - new connection in progress” status.

Other inactive status accuracy

Review of a sample of 31 updates to “inactive” status confirmed that the correct statuses and dates were applied except for one ICP which had an incorrect event date and status, which was discovered and corrected during the audit.

The AC020 audit compliance report identified 625 ICPs that have been recorded as AMI remote disconnections, but AMI is not indicated. 503 ICPs had HHR or AMI metering indicated at the time of disconnection. The other 122 ICPs were not disconnected by CTCT during the audit period and compliance is recorded.

ICPs 0000397349TPCC8 and 0003973495TPE09 have 1,5 “reconciled elsewhere” status as they are supplied by a combination of diesel generators and solar power because the network found it was uneconomical to rebuild the line since the land it was on was coastal and eroding. The correct status is applied because the ICPs do not need to be reconciled and this is the status that best fits.

Monitoring of consumption on ICPs with “inactive” status

ICPs which become vacant go through an automated vacant disconnection process. If occupier does not sign up with CTCT or another trader, the ICP will be disconnected.

No consumption is submitted for “inactive” ICP days in SAP. If part of a read-to-read period is “inactive” some of the consumption will be apportioned to “inactive” days and omitted from submission. The issue can be resolved by ensuring that the ICP has “active” status in SAP and the registry for all days it is consuming energy and entering disconnection and reconnection boundary readings.

CTCT’s agents and MEPs continue to read “inactive” ICPs, and the reads are loaded into SAP. SAP generates a BPEM for the wellbeing team where consumption is found on a disconnected ICP based on a scheduled meter reading. Each exception is reviewed individually to determine whether the consumption is genuine, and when the consumption occurred. The team re-initiates disconnection as required. A correction is usually processed by updating the status to “active” for the read-to-read period with consumption, with other teams providing assistance with entering boundary reads. Wellbeing team members have recently been trained to enter boundary readings.

I found that in some cases reconnection boundary readings are not entered into SAP. For instance, if the switch is not complete when the reconnection paperwork is received, reconnection meter reads will not be loaded. If the meter is not set up in SAP when the reconnection job is issued, there will be no metering details on the ORB docket and no meter readings will be provided.

CTCT has found that not all “inactive” consumption exceptions are identified by the BPEMs, and the number of current exceptions has increased over this audit period from 377 ICPs to 636 ICPs and 127,192 kWh of “inactive” consumption to 549,610 kWh. 79 of the ICPs had 5 kWh or less of “inactive” consumption recorded. The increase is believed to be caused by:

- not all exceptions being identified by BPEMs,
- corrections not being processed for all BPEMs where genuine inactive consumption is found,
- SAP settlement unit errors where reconnection updates are not always correctly triggered,
- disconnection and reconnection boundary readings not consistently being entered, and
- ICPs invalidly appearing in the “inactive” consumption list with estimated rather than actual “inactive” consumption.

ICT tickets have been raised to identify the reasons for differences between ICPs with “inactive” consumption identified through reporting and the BPEMs to determine whether the BPEM criteria needs to be revised, and to investigate the settlement unit errors.

A sample of 25 ICPs with “inactive” consumption were checked including the 20 with the most “inactive” consumption. I found seven ICPs had not had corrections processed (31,841 kWh of “inactive” consumption).

I also rechecked “inactive” consumption which had not been corrected at the time of the previous audit and found a correction had been processed for one of the 67 affected ICPs and there is still 51,598.72 kWh of “inactive” consumption which requires investigation and correction.

During review of ICPs missing from AV140 submissions I found a further two ICPs (0000829023HBB60 and 0005745110RNEB8) had “inactive” status since 2021 and 2022 respectively but had non-zero volumes reported in some AV140 reports indicating that their registry status was incorrect. The statuses were corrected during the audit.

The affected ICPs are listed in **appendix 15.1**. Improvement is required in this area to ensure that “inactive” consumption is consistently identified and corrected for.

CTCS

Management of “inactive” status

“Inactive” status is only used once a CTCS approved contractor has confirmed that the ICP has been disconnected, except for some ICPs at “inactive - ready for decommissioning” status which are confirmed to be ready for decommissioning by the network. ICP status is updated to “inactive” using the registry user interface once the correct status and status date are confirmed.

“Inactive - new connection in progress” status accuracy

CTCS uses the “inactive - new connection in progress” status for new connections and sends the MEP nomination when the ICP is claimed.

The registry list recorded seven ICPs at “inactive - new connection in progress” status:

- six of the ICPs were created in March 2023 or later, and one moved to “active” status after the report was run, and
- ICP 0001780783TG6A6 was created in 2021 and was moved to “decommissioned - set up in error” status during the audit; the Account Manager advised that the ICP was no longer required in 2021, but due to an oversight the operations team did not initiate the decommissioning until 2024.

Other “inactive” status accuracy

Review of a sample of 29 updates to “inactive” found they had the correct status reason and event date.

The AC020 audit compliance report identified five ICPs that had been recorded as AMI-remote disconnection, but AMI is not indicated. They were updated to AMI non communicating post the disconnection date.

All five ICPs with the “reconciled elsewhere” statuses are for DUMML ICPs which appear on the DUMML audit register, with aggregated capacity reported under another ICP.

Monitoring of consumption on ICPs with “inactive” status

Data streams remain open for “inactive” ICPs in DataHub and reads will be imported and validated.

CTCS reports on “inactive” ICPs with consumption and investigates any ICPs with “inactive” consumption of 1 kWh or more. Two ICPs with “inactive” consumption were identified, both had 1 kWh or less of

and resolution. Concurrently, we have initiated a ticket with our ICT team to investigate the absence of BPEMs in certain instances and to devise a robust solution.	<u>CTCS</u> 19 Feb 2024	
<u>CTCS</u> Issue has been cleared.		
Preventative actions taken to ensure no further issues will occur	Completion date	
<u>CTCT</u> We are developing this exception into our new exception management tool to identify this quickly and resolve it. Our ICT team is investigating why in some instances there were no BPEMs created. Additional resources have been allocated on an ongoing basis to clear the exceptions quickly.	<u>CTCT</u> August 2024	
<u>CTCS</u> After the recent audit in Feb 2024, Simply Energy immediately implemented a process dedicated to monitoring ALL New and Ready statuses across all Simply codes. The operations Team Lead is acting as Quality Control on a fortnightly basis.	<u>CTCS</u> 19 Feb 2024	

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

CTCT

Any requests received from distributors regarding ICPs at "new" and "ready" status are actioned as they are received.

A report is generated with all ICPs at "new" and "ready" status and the initial electrical connection date (if any) on the registry. It is reviewed by the switching team to identify any ICPs which may have become "active" so that connection paperwork can be followed up. When responsibility for monitoring

“new” and “ready” ICPs moved to the switching team, the process to monitor ICPs at the status for more than two years was stopped. Compliance is recorded because trader monitoring of long term “new” and “ready” ICPs is not required by the Code.

Analysis of the registry list found 149 ICPs at the “new” and “ready” statuses for two years or more, a small increase from 142 ICPs in the previous audit. I checked the 20 oldest ICPs with “new” or “ready” status, which were created between 2016 and 2019:

- ten ICPs have no information available confirming whether they are required or have been connected,
- seven ICPs are part of a Counties Power ICP deconsolidation process and are under investigation,
- ICP 0000460307WT723 has been confirmed not to be required and should be decommissioned,
- ICP 1002068246LC3BA is under investigation with the MEP to confirm whether it has been livened, as renovations at the address appear to be complete, and
- ICP 0000616152MP383 had the correct status, it is still needed as the customer is planning to build at the address in the future.

CTCS

New connections in progress are monitored using Salesforce workflows, and cases remain open until the connection is complete. New connections were also monitored using Salesforce dashboard reports daily.

The Salesforce Dashboard reports ICPs which are at “new” or “ready” status, which is compared to a registry list which has CTCS as the proposed trader. Any new ICPs from the registry list are added to Salesforce, and application details are followed up with the customer and/or network as needed.

There is currently no active monitoring of ICPs which have been at “new” or “ready” status for over 24 months. A small number of new connections are completed, and they are closely monitored.

No ICPs have been at “new” or “ready” status for more than 24 months.

Audit outcome

Compliant

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

No switching activity occurred for CTCX during the audit period.

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

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

Audit observation

The switch gain process was examined to determine when 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.

Customers complete applications on Contact's website, or if they apply by phone a CSR creates the application on the customer's behalf on Contact's website or enters the application details directly into the SAP CRM. For website applications a robot loads the application data into the SAP CRM. Once the application information is complete in CRM, the NT file will be automatically created and sent to the registry. If the process fails a BPEM will be created, so that a user can investigate and send the file.

The application process collects information on the ICP to be switched, whether the customer is moving in and their move in date, so that the correct switch event type and date can be determined. Transfer switch type is applied where a customer is transferring between retailers at an address. Switch move is sometimes applied for transfer switches with the other trader's agreement if a certain switch event date is required, but this has not occurred during this audit period.

I checked the metering category for the 13,248 transfer switch NTs where this information was available on the PR255 report and found none had metering categories of three or above.

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

CTCS

CTCS 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.

The CTCS code supplies customers for Simply Energy and other retailers using its white label service. Customer application information is loaded into Emersion and then transferred to Salesforce every five minutes. Salesforce validates the information and automatically creates the NT which is pushed to the registry by a SQL script every two hours. If the NT fails validation or cannot be generated it is directed to a user to review and correct on the Salesforce Potential ICPs – New – Requires Attention screen. ICPs typically require attention because the proposed switch event date is back dated, or future dated. Registry acknowledgement files are monitored twice daily, and any file failures are investigated and reissued as necessary.

Where a large number of ICPs require NTs created on a given day, CTCS creates a batch file of application details which can be imported directly into Salesforce to save time. A copy of the file is also provided to Emersion IT support so that it can be loaded into Emersion.

The application process collects information on the ICP to be switched, whether the customer is moving in and their move in date, so that the correct switch event type and date can be determined. Salesforce selects the switch type based on the metering category and the proposed switch type set in Emersion. ICPs with a metering category of 3, 4 or 5 are set to HH, and ICPs with metering category of 1 or 2 are set to switch move if the customer is moving in, or transfer if the customer is transferring between retailers at their current address. Switch move is sometimes applied for transfer switches with the other trader's agreement if a certain switch event date is required.

I checked the metering category for 119 transfer switch NTs where this information was available on the PR255 report and found none had metering categories of three or above.

The five most backdated NT files were checked. The correct switch type was selected for four ICPs, and all were sent within two business days of pre-conditions being cleared. ICP 0208275169LC0EF NT-8492202 had an incorrect switch type recorded because of a manual data entry error, and the switch was withdrawn and re-requested.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 2 Schedule 11.3 From: 10-Aug-23 To: 10-Aug-23	CTCS One transfer NT file was issued with an incorrect switch type. The switch was withdrawn and re-requested with the correct switch type. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are strong. A manual data entry error occurred when loading the application information into Emersion.</p> <p>The impact is low, because the switch was withdrawn and re-requested with the correct switch type.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCS</u></p> <p>Issue has been cleared.</p>		<p><u>CTCS</u></p> <p>N/A</p>	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCS</u></p> <p>We implemented a new change and refresher with a joint team to ensure that the correct switch type is selected and/or emphasised in our existing Onboarding Process. This ensures that data quality and timeliness is a daily priority.</p>		<p><u>CTCS</u></p> <p>6 Mar 2024</p>	

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 history report was examined for the audit period.

Audit commentary

CTCT

AN content

ANs are automatically generated by SAP on receipt of an incoming NT file. If SAP cannot generate an AN file a BPEM is generated and an operations team member either corrects the error so that the AN can be sent from SAP, or manually creates the AN on the registry. Failures most commonly occur where the switch event date cannot be confirmed (BPEM CL16).

I checked the AN response codes for 1,493 transfer switch ANs and found they were consistent with the information recorded on the registry and held by CTCT for the ICPs except for:

- one AN⁶ generated manually on the registry with an incorrect response code,
- three ANs⁷ with incorrect response codes applied by SAP because metering and/or status information was incorrect in SAP at the time the AN was generated, and
- ICP 1001146821LC520 had the PD (premises disconnected) response code applied in error by SAP; a disconnection was in progress at the time the AN was issued but the ICP was “active” (an ICT ticket has been raised to investigate).

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

- 99.99% had a proposed event date within five business days of the NT receipt date, and
- all had proposed event dates within ten business days of the NT receipt date.

AN timeliness

AN files are automatically generated by SAP on receipt of an incoming NT file, and BPEMs are generated for investigation and resolution if the process fails. The switch breach history report is reviewed twice daily to identify any AN files which are close to falling due so that they can be checked and processed.

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

CTCS

AN content

AN files are generated by Salesforce automatically once an NT is received, provided that the ICP has a switch loss in progress, the proposed switch date is in the future, and a valid response code can be determined by Salesforce. If any of these conditions are not met, an exception is generated for resolution by the Operations Team.

AN response codes are selected by Salesforce based on a hierarchy. For transfer switches, the gaining trader's requested date is applied if it is within five business days of the NT receipt date, otherwise the NT receipt date + five business days is applied.

I checked the AN response codes for the 181 transfer switch ANs where the ICP was recorded on the registry list with history. I found the codes applied were consistent with the registry information for the ICPs.

⁶ 0000029175WE6DC AN-8093751 AA (acknowledge and accept) was applied but AD (advanced metering) should have been applied.

⁷ 0000167597CKFE7 AN-7838507 and 1002170396LC671 AN-7871762 had MU (unmetered supply) applied because their metering was not correctly set up in SAP, and 0000056976CP11A AN-8132657 had PD (premises electrically disconnected) applied because a disconnection field services job was marked as completed when it was later discovered the job was not completed successfully.

The event detail report was reviewed for all transfer ANs to assess compliance with the setting of event dates requirements. All had proposed event dates within five business days of the NT receipt date.

AN timeliness

Incoming NT files are retrieved from the registry and loaded into Salesforce every two hours during business hours. The incoming NTs are displayed on the switch loss dashboard with details of the NT received date, proposed switch date, metering category and proposed switch type.

For HH and transfer switches, CTCS requests confirmation that the ICP can switch out from their white label customer or the solutions team depending on which brand supplies the ICP. If approval is not received within 24 hours, the AN is released and the withdrawal process is used to cancel the switch if necessary. Salesforce automatically generates the AN, and outgoing AN files are pushed to the registry using a SQL script every two hours during business hours.

Exceptions are generated and viewed in Salesforce where an outgoing AN file cannot be automatically created and sent. Users check these exceptions daily and resolve any issues. The switch breach history report is monitored twice daily to identify AN files which are close to falling due, and registry acknowledgement files are monitored with an email provided to the operations team after each switching file transfer to the registry.

There were no AN breaches recorded in the switch breach history report for CTCS.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 4.2 With: Clauses 3 and 4 Schedule 11.3 From: 04-May-23 To: 05-Dec-23	CTCT Five of the 1,493 transfer switch AN files checked had incorrect response codes. 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 strong. Almost all of the AN files checked had correct response codes. The exception, which did not occur due to a data entry error or SAP data being out of date, is under investigation. The impact is low, because information on the ICPs' attributes can be obtained from the registry as well as the AN response code.	
Actions taken to resolve the issue	Completion date	Remedial action status
<u>CTCT</u>	<u>CTCT</u> September 2024	Identified

<p>One AN⁸ generated manually on the registry with an incorrect response code:</p> <p>Contact have provided refresher training to the users to reduce these errors.</p> <p>Three ANs⁹ with incorrect response codes applied by SAP because metering and/or status information was incorrect in SAP at the time the AN was generated:</p> <p>The main reason for the discrepancy was that the SAP system had not finished updating the meter setups for the latest switch gain when the switch loss came in. SAP system usually updates the meters/statuses automatically, but sometimes there are delays due to exceptions.</p> <p>ICP 1001146821LC520 had the PD (premises disconnected) response code applied in error by SAP; a disconnection was in progress at the time the AN was issued but the ICP was “active” (an ICT ticket has been raised to investigate):</p> <p>Ticket has been raised with our ICT team to investigate the issue and find the solution for it.</p>		
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Contact have given additional instruction to the staff who manually create AN's and raised ticket for the ICT team to investigate the issue with the PD code when disconnection service orders are in progress.</p>	<p><u>CTCT</u></p> <p>September 2024</p>	

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*

⁸ 0000029175WE6DC AN-8093751 AA (acknowledge and accept) was applied but AD (advanced metering) should have been applied.

⁹ 0000167597CKFE7 AN-7838507 and 1002170396LC671 AN-7871762 had MU (unmetered supply) applied because their metering was not correctly set up in SAP, and 0000056976CP11A AN-8132657 had PD (premises electrically disconnected) applied because a disconnection field services job was marked as completed when it was later discovered the job was not completed successfully.

- *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. 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

CS files are automatically generated by SAP on receipt of an incoming NT file. If SAP cannot generate a CS file a BPEM is generated and an operations team member either corrects the error so that the CS can be sent from SAP, or manually creates the CS on the registry. Failures most commonly occur where no actual readings have been received for 365 days (BPEM CL02) or there is an implausible reading (BPEM CL08).

The switch breach history report is reviewed twice daily to identify any CS files which are close to falling due so that they can be checked and processed.

The switch breach history report for the audit period recorded two CS breaches where the CS was not sent within five business days of the actual transfer date. In both cases the ICPs had not received a read during the previous 365 business days and SAP automatically extended the switch event date to ten business days after NT receipt to allow time to obtain a reading, but the switch breach history report did not take the change into account making it more difficult to identify the overdue files. The late files were detected and issued within seven and nine days of the due date.

CS content

SAP generates CS files and uses its logic to determine the CS content. Average daily consumption is calculated as the average daily consumption between the last two actual readings. There are two known scenarios that can produce inaccurate average daily consumption values:

- implausible readings where the current reading is slightly lower than the previous reading; the average daily consumption calculation treats the meter as if it has rolled over, and calculates high consumption, and
- meter modifications where the same meter is installed and removed in SAP, to correct an error; the average daily consumption calculation applies zero in these instances.

A solution to the meter modification issue is being tested and is expected to be implemented in February 2024. The switching team is working with the billing team to determine a solution to the issues with implausible reads.

Analysis of the average daily kWh on the event detail report found:

- no CS files had average daily kWh which was less than zero,
- 41 CS files had zero average daily kWh, and a sample of five were checked; all five had zero incorrectly reported due to meter modifications, and should have had between 3 and 18 kWh per day, and
- three CS files had average daily kWh over 200 kWh; two were correct and one had high consumption recorded in error due to an implausible reading.

I checked for discrepancies between the last actual read date and switch event reading type for 1,244 transfer switch CS files:

- CS files for ICPs 0000031936WED55 and 0000031558EA954 had a last actual read date on the day before the CS event date with an estimated switch event read type applied; both ICPs had more than one meter reading per day due to disconnections, reconnections and customer changes which complicated the process.
- the CS file for ICP 0005869897RN306 had a last actual read date more than one day before the switch event date with an actual switch event read applied; the incorrect last actual read date was recorded because a meter modification complicated the process, and
- two CS files had missing CSMETERINSTALL, CSMETERCOMP or CSMETERCHANNEL rows and I confirmed that the ICPs were unmetered at the time of the switch.

The inaccurate CS content found is listed below:

ICP	Event audit no	Event date	Update date	Issue
0000031936WED55	CS-4733276	5 April 2023	5 April 2023	Incorrect read type E should be A
0000031558EA954	CS-4813428	3 June 2023	9 June 2023	Incorrect last actual read date
0005869897RN306	CS-5192842	20 October 2023	21 October 2023	Incorrect last actual read date

I checked the content of a further seven CS files and confirmed that all details were accurately recorded.

CTCS

CS timeliness

Staff identify CS files which are due using the Gain acknowledged view in Salesforce. The switch breach history report is monitored twice daily to identify CS files which are close to falling due, and registry acknowledgement files are monitored with an email provided to the operations team after each switching file transfer to the registry. If a failed CS file was not identified as part of this check, it would remain on the switch breach history report until the registry is correctly updated.

No CS breaches were recorded on the switch breach history report.

CS content

Staff identify CS files which are due using the Gain acknowledged view in Salesforce and the switch breach history report. They key and/or copy and paste the data required to complete the switch into Salesforce so that the CS file can be issued including:

- the switch event date,
- the last actual read date from DataHub,
- the switch event reading and read type from DataHub, and
- the average daily consumption between the last two actual readings.

If a large number of switches are being processed on a given day, the required data can be extracted from DataHub using SQL queries and added to a spreadsheet for import into DataHub.

Once the data has been entered, the SQL process can be manually triggered to run immediately, otherwise the file will be generated and sent with the next two hourly SQL transfer. There is a SQL job which updates the average daily kWh in Salesforce with the current DataHub value every two hours between 7am and 9pm, so CTCS prefers to send the file immediately to ensure that the average daily kWh remains the value they have selected.

All CS data is independently reviewed. The attributes recorded in Salesforce are recorded against the ICP in the switch breach history report (which is used to identify ICPs which require CS files), and this is checked by another operations team member for accuracy. This review may occur after the CS is sent, and if an error is found a withdrawal will be processed.

Analysis of the average daily kWh on the event detail report found:

- no CS files had average daily kWh which was less than zero,
- eight CS files had zero average daily kWh, and
- seven CS files had average daily kWh over 200 kWh.

I checked a sample of five CS files for each exception type and found the average daily kWh was correct and based on the last two actual reads.

I checked for discrepancies between the last actual read date and switch event reading type for 126 transfer switch CS files:

- 0359638147LC225 CS-5023178 had a last actual read date the day before the switch event date and an estimated switch event read type, because the last actual read date had been incorrectly entered into Salesforce, and
- two ICPs had last actual read dates more than one day before the switch event date with an actual switch event read type: ICP 0000003020KPDE7 CS-5300819 had an incorrect switch event read type and ICP 0000193434TRF85 CS-5300819 had an incorrect last actual read date.

The inaccurate CS content found is listed below:

ICP	Event audit no	Event date	Update date	Issue
0359638147LC225	CS-5023178	5 October 2023	5 October 2023	Incorrect last actual read date, should have been 3 October 2023 not 4 October 2023
0000003020KPDE7	CS-5160793	18 October 2023	18 October 2023	Incorrect read type A should have been E
0000193434TRF85	CS-5300819	8 November 2023	8 November 2023	Incorrect last actual read date, should have been 7 November 2023 not 6 November 2023

I checked the content of a further seven CS files and confirmed that all details were accurately recorded.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 4.3</p> <p>With: Clause 5 Schedule 11.3</p> <p>From: 21-Apr-23</p> <p>To: 08-Nov-23</p>	<p>CTCT</p> <p>Two CS breaches.</p> <p>Six transfer switch CS files contained an incorrect average daily kWh out of a sample of ten files with high or zero average daily kWh.</p> <p>Two CS files contained incorrect last actual read dates.</p> <p>One CS file contained an incorrect read type.</p> <p>CTCS</p> <p>Two CS files contained incorrect last actual read dates.</p> <p>One CS file contained an incorrect read type.</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	
<p>Low</p>	<p>The controls are strong because a small number of errors were identified. The issues causing inaccurate average daily consumption under certain circumstances for CTCT have been identified and the switching team is working on solutions. CTCS tries to issue CS files immediately to prevent the average daily consumption value from being overwritten.</p> <p>The impact is low.</p> <ul style="list-style-type: none"> • There were no incorrect switch event readings, and all switch event read types are treated as validated and permanent by the reconciliation process. • The average daily consumption value only has an impact if the gaining retailer uses it to create forward estimate where actual readings are not available, and there were a small number of late files. 	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Two CS breaches.</p> <p>Due to a technical issue with the registry switch breach report, these overdue files were not detected. Contact has implemented a manual process to pick up these files in a timely manner. We have also provided our users with additional training to reduce the occurrence of late files in the future.</p> <p>Six transfer switch CS files contained an incorrect average daily kWh out of a sample of ten files with high or zero average daily kWh.</p>	<p><u>CTCT</u></p> <p>August 2024</p>	<p>Investigating</p>

<p>System solution is developed for zero average daily consumption issue and currently in UAT testing stage. It is expected to be deployed in the system by end of March 2024.</p> <p>We are exploring the system/process change where average daily consumption is registered high due to implausible read.</p> <p>Two CS files contained incorrect last actual read dates & one CS file contained an incorrect read type.</p> <p>These issues are with our ICT team to investigate and find the system solution.</p> <p><u>CTCS</u> These historic issues cannot be corrected.</p>	<p><u>CTCS</u> N/A</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u> Contact has implemented a manual process for when registry switch breach reports are not picking up overdue files. We have provided our agents further training and tickets are raised with our ICT team to deploy the solution for system issues.</p> <p><u>CTCS</u> A QA process was implemented on 01/11/2022, where a backup person checks that the CS data is correct then gives the final approval, however it was discovered in the recent audit in Feb of 2024, that stronger controls were required. We have immediately implemented a new change where we now have extra staff on to assist with the QA process. The CS Automation which is Phase 2 of the Switching Automation is currently scheduled for Quarter 4 of 2024.</p>	<p><u>CTCT</u> August 2024</p> <p><u>CTCS</u> Dec 2024</p>	

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

- the gaining trader may dispute the switch meter reading if the validated meter reading or permanent estimate provided by the losing trader differs by 200 kWh or more (clause 6(b)).

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within four calendar months of the 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 history report for the audit period was reviewed.

Audit commentary

CTCT

RR

Inaccurate switch event reads are normally identified through the read validation process, or the customer querying their first bill. When a potential discrepancy is identified, CTCT gains a second actual reading as soon as possible. If the two actual readings 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. The switching team provides process support where requested, including for complex cases. CTCT attempts to issue RRs within four months as required by this clause.

BPEMs are generated for accepted and rejected AC files returned by other traders. These BPEMs are processed daily by the switching team, who manually update the switch event readings in SAP.

CTCT issued 53 RR files for transfer switches. 37 were accepted and 16 were rejected. For the sample of five acceptances and five rejections checked there was a genuine reason for CTCT's RR, and the read value recorded in SAP reflected the outcome of the RR process. The following exceptions were identified:

ICP	Event audit no	Event date	Update date	Issue
0000818179HB871	RR-202577	25 August 2023	18 September 2023	The read type in SAP was recorded as E but should have been A.
0002330820TG10B	RR-204481	25 October 2023	6 November 2023	The RR was not supported by at two validated actual readings.

ICP	Event audit no	Event date	Update date	Issue
				One customer reading and one actual reading were applied.

The switch breach history report recorded one late RR for a transfer switch which was delayed while CTCT obtained readings to confirm that the RR was required and determine the expected switch event reading.

AC

A BPEM (SR08) is generated when an RR file is received. These are worked through manually and accepted or rejected, then the BPEM is closed by the user. Another user is responsible for reviewing the switch breach report each morning and afternoon and checking any ICPs close to breaching, which are followed up with the user responsible.

One transfer switch AC file where an NT was issued during the audit period was identified. It was accepted by CTCT, and the switch was later withdrawn.

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

CS files with estimated readings where no RR is issued

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

CTCS

RR

Inaccurate switch event reads are normally identified through review of the advanced ICPs with estimated switch in reads dashboard (which compares the switch in reading to later actual readings), the read validation process, or the customer querying their first bill. CTCS obtains two actual readings to determine the correct switch event read and support the RR and then issues an RR file.

If the proposed switch event reading is estimated, the RR file will be issued from Salesforce. If the proposed switch event reading is actual, the file RR file will be manually created using the registry user interface because Salesforce automatically classifies RR file readings as estimates.

AC responses to the CTCS RR appear on the switching dashboard and the switch event readings are manually updated in DataHub at the same time. Once validated, the readings are transferred to MADRAS for NHH settled ICPs.

The RR's progress is tracked in a spreadsheet, and using the Outlook inbox to make sure that a response is received from the other trader and correctly actioned.

CTCS issued seven RR files for transfer switches. Six were accepted and one was rejected. There was a genuine reason for the RRs and the read value recorded in DataHub and MADRAS reflected the outcome of the RR process. No RR breaches were recorded in the switch breach history report.

AC

Incoming RR files are identified on the switching dashboard and tracked using a spreadsheet. Each incoming RR is reviewed including any supporting correspondence from the other trader to determine whether it should be accepted to rejected. The AC file is created by Salesforce once the user has selected the appropriate response, and the switch event readings are manually updated in DataHub at the same time. Once validated, the readings are transferred to MADRAS for NHH settled ICPs.

The switch breach history report is monitored twice daily to identify AC files which are close to falling due, and registry acknowledgement files are monitored with an email provided to the operations team after each switching file transfer to the registry. If a failed AC file was not identified as part of this check, it would remain on the switch breach history report until the registry is correctly updated.

CTCS issued 11 AC files for transfer switches. Four rejected the other trader's RR and seven accepted the other trader's RR. A sample of nine ACs were checked, and in all cases the readings in DataHub and MADRAS (for NHH settled ICPs) reflected the outcome of the RR process, and rejections were for valid reasons.

No AC breaches were recorded on the switch breach history report.

CS files with estimated readings where no RR is issued

Review of five transfer CS files with estimated reads where no RR was issued confirmed that the correct reading values were recorded in DataHub and MADRAS.

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: 18-Sep-23</p> <p>To: 17-Nov-23</p>	<p>CTCT</p> <p>One RR breach.</p> <p>For one RR SAP had an incorrect read type recorded.</p> <p>One RR was not supported by two actual reads and was accepted by the other trader.</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		
<p>Low</p>	<p>The controls are rated as strong and will mitigate risk to an acceptable level.</p> <p>The impact assessed to be low because the RR was completed with sufficient time for revised submission information to be provided, and the accuracy exceptions had no impact on submission.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>One RR breach & One RR was not supported by two actual reads and was accepted by the other trader.</p> <p>Our RR procedure is robust and requires two verified readings before initiating the RR process. However, we sometimes face difficulties in accessing the meters and this leads to delays. We trigger the RRs as quickly as possible once we have two verified readings.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Identified</p>

<p>We believe our procedures are effective in reducing late RRs and to ensure two actual reads are obtained but access issues can impact the result at times. We have also advised our agents to make their best efforts to obtain two verified reads for the RRs.</p> <p>For one RR SAP had an incorrect read type recorded.</p> <p>We have provided refresher training to our agents to ensure correct read type is recorded when corrections are made after the RR process.</p>		
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Contact has provided further training to our users to ensure correct read type is used and best efforts are made to gather two verified reads for RR process.</p>	<p><u>CTCT</u></p> <p>Ongoing</p>	

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

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.

CTCT

CTCT did not issue any read change requests where clause 6(2) and (3) of schedule 11.3 applied. All acknowledgements where clause 6(2) and (3) of schedule 11.3 applied were accepted.

CTCS

CTCS did not issue any read change requests where clause 6(2) and (3) of schedule 11.3 applied. All acknowledgements where clause 6(2) and (3) of schedule 11.3 applied were accepted.

Audit outcome

Compliant

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

Code reference

Clause 7 Schedule 11.3

Code related audit information

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

Audit observation

I confirmed with 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 for any of the participant codes.

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

The NT process is discussed in **section 4.1** and is the same for transfer switches and switch moves.

CTCT

I checked the metering category for the 35,445 switch move ICPs where this information was available on the PR255 report and found none had metering categories of three or above.

The 15 most backdated NT files were checked. They were sent within two business days of pre-conditions being cleared, and the correct switch type was selected.

CTCS

I checked the metering category for the 312 switch move NTs where this information was available on the PR255 report and found none had metering categories of three or above.

The ten most backdated NT files were checked. I found that all of the NTs were issued within two business days of pre-conditions being cleared, and the correct switch type was selected. Some of the NTs were reissued following a withdrawal and I confirmed that they were issued the same day the withdrawal was completed.

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

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

Audit observation

The 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 history report was examined for the audit period.

Audit commentary

CTCT

AN content

The process to create AN files is the same for transfer switches and is documented in **section 4.2**.

I checked the AN response codes for the 369 ICPs and found they were consistent with the information recorded on the registry and held by CTCT for the ICPs except:

- four ANs¹⁰ generated manually on the registry had incorrect response codes,
- 0000908567TU92F AN-8001551 had MU (unmetered supply) applied because its metering was not correctly set up in SAP at the time the AN was generated, and
- ICP 0000002028CP674 AN-7881833 had the PD (premises electrically disconnected) response code applied in error by SAP; a disconnection was in progress at the time the AN was issued but the ICP was “active” (an ICT ticket has been raised to investigate).

The event detail report was reviewed for 1,744 switch move ANs to assess compliance with the setting of event dates requirements. All ANs had proposed event dates within ten business days of the NT receipt date, and no ANs had a proposed event date before the gaining trader’s requested date.

The switch breach history report recorded:

- one E2 breach where the CS transfer date was more than ten business days after the NT receipt date, which was delayed while Contact confirmed whether the switch was for the correct property, and
- three ET breaches where the AN expected transfer date was more than ten business days after the NT receipt date; all of the switches were withdrawn before switch completion, and the breaches occurred because the gaining trader’s non-compliant requested event date was applied.

Contact is developing an exception to identify incoming NTs with non-compliant proposed event dates, so that a withdrawal can be issued, and the gaining trader can be asked to re-issue the NT with a compliant date.

AN and CS timeliness

AN and CS files are automatically generated by SAP on receipt of an incoming NT file, and BPEMs are generated for investigation and resolution if the process fails. The switch breach history report is reviewed twice daily to identify any AN files which are close to falling due so that they can be checked and processed.

The switch breach history report did not record any alleged breaches relating to AN or CS timeliness.

CTCS

AN content

For switch moves, proposed event dates are recorded as the gaining trader’s proposed event date unless it is in the future, or more than 90 days in the past. NTs with event dates more than 90 days in the past or future event dates do not have an AN file created and are moved to a workflow for manual

¹⁰1001269009LC675 AN-7884210, 0000056583UN4DD AN-8056833, and 0006516914TU1C8 AN-8072753 AA (acknowledge and accept) was applied but AD (advanced metering) should have been applied. 0000142299UN9EE AN-8001533 AA (acknowledge and accept) was applied but PD (premises electrically disconnected) should have been applied.

intervention by the Operations Team. This intervention may include negotiating a different date with the other trader, and/or issuing a withdrawal request.

I checked the AN response codes for the 1,579 switch move ANs where the ICP was recorded on the registry list with history. I found the codes applied were consistent with the registry information.

The event detail report was reviewed for all switch move ANs to assess compliance with the setting of event dates requirements. All ANs had proposed event dates which matched the gaining trader's requested date and were within ten business days of the NT receipt date.

AN and CS timeliness

Incoming NT files are retrieved from the registry and loaded into Salesforce every two hours during business hours. The incoming NTs are displayed on the switch loss dashboard with details of the NT received date, proposed switch date, metering category and proposed switch type.

CTCS selects the AN files to be released within Salesforce, and Salesforce automatically generates the AN. Outgoing AN files are pushed to the registry using a SQL script every two hours during business hours. Exceptions are generated and viewed in Salesforce where an outgoing AN file cannot be automatically created and sent. Users check these exceptions daily and resolve any issues. The switch breach history report is monitored twice daily to identify AN files which are close to falling due.

Staff identify CS files which are due using the Gain acknowledged view in Salesforce. They load the data required to complete the switch into Salesforce so that the CS file can be issued. Exceptions are generated and viewed in Salesforce where an outgoing CS file cannot be sent. Users check these exceptions daily and resolve any issues.

The switch breach history report is monitored twice daily to identify AN and CS files which are close to falling due, and registry acknowledgement files are monitored with an email provided to the operations team after each switching file transfer to the registry.

There were not any AN or CS breaches recorded on the switch breach history report for CTCS.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.8 With: Clause 10(1) Schedule 11.3 From: 18-Apr-23 To: 25-Oct-23	CTCT Six of the 369 switch move AN files checked had incorrect response codes. One E2 breach. Three ET breaches. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	The controls are strong.

	<ul style="list-style-type: none"> • Almost all of the AN files checked had correct response codes. The only exception, which did not occur due to a data entry error or SAP data being out of date, is under investigation. • A small number of switching breaches were identified compared to the number of files generated. They occurred due to date changes, investigation before the switch was completed and the gaining trader requesting a non-compliant event date. <p>The impact is low, information on the ICP's attributes can be obtained from the registry as well as the AN response code, and the switch breaches had a minor impact on the customer and other trader.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Six of the 369 switch move AN files checked had incorrect response codes</p> <p>Contact have provided refresher training to the users to ensure correct AN code is selected when ANs are created manually in the registry.</p> <p>With SAP generating the incorrect AN code, it was mostly due to timing issue as recent switch gain was not yet fully completed in SAP when switch loss was received. SAP system usually update the meters/statuses automatically, but sometimes there are delays due to exceptions. We have also raised ticket with our ICT team to investigate the issue around PD code.</p> <p>One E2 breach.</p> <p>Switch loss was delayed due to confusion to ensure correct ICP was switching out. We have provided further instructions to our agents to ensure all switch loss files are processed in a timely manner.</p> <p>Three ET breaches.</p> <p>We are deploying the system change to resolve this issue by the end of March 2024. It is currently under testing.</p>	<p><u>CTCT</u></p> <p>September 2024</p>	<p>Investigating</p>
Preventative actions taken to ensure no further issues will occur	Completion date	
<p><u>CTCT</u></p> <p>Ticket is raised with our ICT team to investigate PD issue on ANs when service order is in progress, and we have provided further instructions to our agents to ensure correct AN code is selected when ANs are created manually.</p> <p>System change is expected to be deployed for ET breaches by the end of March 2024.</p>	<p><u>CTCT</u></p> <p>September 2024</p>	

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

The event detail report was reviewed for 1,744 switch move AN files which also had an NT file on the event detail report. I found that 81 had proposed event dates which differed from the gaining trader's event date, and the newly proposed event dates were compliant.

All switch move ANs checked had a valid switch response code, and switches were completed as required by this clause.

The switch breach history report recorded one E2 breach and three ET breaches which are recorded as non-compliance in **section 4.8**.

CTCS

The event detail report was reviewed for 1,579 switch move ANs which also had an NT file on the event detail report. I found all ANs had proposed event dates which matched the gaining trader's requested date and were within ten business days of the NT receipt date. Switches were completed as required by this clause.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 11.3

Code related audit information

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

- *the event date (clause 11(a)); and*
- *a switch event meter reading as at the event date for each meter or data storage device that is recorded in the registry with an accumulator type of C and a settlement indicator of Y (clause 11(b)); and*

- *if the switch event meter reading is not a validated meter reading, the date of the last meter reading of the meter or storage device (clause (11(c)).*

Audit observation

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

SAP generates CS files and uses its logic to determine the CS content as described in **section 4.3**. Average daily consumption is calculated as the average daily consumption between the last two actual readings. There are two known scenarios that can produce inaccurate average daily consumption values - implausible readings and meter modifications. Solutions for both issues are being worked on.

Analysis of the average daily kWh on the event detail report found:

- no CS files had average daily kWh which was less than zero,
- 93 CS files had zero average daily kWh, and a sample of five were checked; four were correct and one had zero incorrectly reported due to a meter modification, and
- three CS files had average daily kWh over 200 kWh; one was correct and two had high consumption incorrectly reported due to implausible readings.

I checked for discrepancies between the last actual read date and switch event reading type for 962 switch move CS files:

- one CS file had a last actual read date more than one day before the switch event date with an actual switch event read applied; the incorrect read type was recorded because a meter modification complicated the process, and the switch was later withdrawn, and
- four CS files had missing CSMETERINSTALL, CSMETERCOMP or CSMETERCHANNEL rows and I confirmed that the ICPs were unmetered at the time of the switch.

I checked the content of a further seven CS files and confirmed that all details were accurately recorded.

The inaccurate CS content found is listed below:

ICP	Event audit no	Event date	Update date	Issue
0002710536EN54D	CS-4805226	30 May 2023	2 June 2023	The read type in the CS file was A but should have been E.

CTCS

CS content

The process to create CS files is compliant and documented in **section 4.3**.

Analysis of the average daily kWh on the event detail report found:

- no CS files had average daily kWh which was less than zero,
- 61 CS files had zero average daily kWh, and

- 100 CS files had average daily kWh over 200 kWh.

I checked a sample of five CS files for each exception type and found the average daily kWh was correct and based on the last two actual reads.

I checked for discrepancies between the last actual read date and switch event reading type for 1,616 switch move switch CS files:

- 11 ICPs had a last actual read date the day before the switch event date and an estimated switch event read type; I checked a sample of three and found two were HHR metered and no readings were available, and ICP 1000497407PCB1F CS-5325072 had the incorrect last actual read date entered into Salesforce, and
- five ICPs had last actual read dates more than one day before the switch event date with an actual switch event read type; three¹¹ had an incorrect switch event read type and two¹² had an incorrect last actual read date.

I checked the content of a further seven CS files and confirmed that all details were accurately recorded.

The inaccurate CS content found is listed below:

ICP	Event audit no	Event date	Update date	Issue
1000497407PCB1F	CS-5325072	1 October 2023	23 November 2023	Incorrect last actual read date, should have been 31 August 2023 not 30 September 2023.
0000253522UNF7F	CS-4744144	14 April 2023	17 April 2023	Incorrect last actual read date, should have been 13 April 2023 not 13 March 2023.
0007703785WEB6B	CS-4963916	1 September 2023	19 September 2023	Incorrect last actual read date, should have been 31 August 2023 not 31 July 2018.
0000161818CK5BB	CS-4844643	1 July 2023	3 July 2023	Incorrect read type A should have been E.
0015726023ELOFC	CS-5252534	1 October 2023	30 October 2023	
0015726036EL71E	CS-5252537	1 October 2023	30 October 2023	
0000161818CK5BB	CS-4844643	1 July 2023	3 July 2023	Incorrect average daily consumption because value was overwritten before the CS was issued from Salesforce. 98 applied but should have been 96.
0015726023ELOFC	CS-5252534	1 October 2023	30 October 2023	Incorrect average daily consumption because value was overwritten before the CS was issued from Salesforce.

¹¹ 0000161818CK5BB CS-4844643, 0015726023ELOFC CS-5252534 and 0015726036EL71E CS-5252537

¹² 0000253522UNF7F CS-4744144 and 0007703785WEB6B CS-4963916

ICP	Event audit no	Event date	Update date	Issue
				882 applied but should have been 996.
0015726036EL71E	CS-5252537	1 October 2023	30 October 2023	Incorrect average daily consumption because value was overwritten before the CS was issued from Salesforce. 526 applied but should have been 530.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 4.10</p> <p>With: Clause 11 Schedule 11.3</p> <p>From: 02-Jun-23</p> <p>To: 23-Nov-23</p>	<p>CTCT</p> <p>One CS file contained an incorrect read type.</p> <p>Three switch move CS files contained an incorrect average daily kWh.</p> <p>CTCS</p> <p>Three switch move CS files had incorrect last actual read dates.</p> <p>Three switch move CS files had their switch event read type recorded as actual, but should have been estimated.</p> <p>Three switch move CS file had incorrect average daily consumption.</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
<p>Low</p>	<p>The controls are strong because a small number of errors were identified. The issues causing inaccurate average daily consumption under certain circumstances for CTCT have been identified and the switching team is working on solutions. CTCS tries to issue CS files immediately to prevent the average daily consumption value from being overwritten.</p> <p>The impact is low.</p> <ul style="list-style-type: none"> • There were no incorrect switch event readings, and all switch event read types are treated as validated and permanent by the reconciliation process. • The average daily consumption value only has an impact if the gaining retailer uses it to create forward estimate where actual readings are not available.

Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u> One CS file contained an incorrect read type. Contact has raised ticket with our ICT team to investigate and find the solution for the system issue.</p> <p>Three switch move CS files contained an incorrect average daily kWh. System solution is developed for zero average daily consumption issue and currently in UAT testing stage. It is expected to be deployed in the system by end of March 2024. We are exploring the system/process change where average daily consumption is registered high due to implausible read.</p> <p><u>CTCS</u> These historic issues cannot be corrected.</p>	<p><u>CTCT</u> August 2024</p> <p><u>CTCS</u> N/A</p>	<p>Investigating</p>
Preventative actions taken to ensure no further issues will occur	Completion date	
<p><u>CTCT</u> Tickets are raised with our ICT team to investigate the issues and develop the solutions. System change is expected to be deployed by the end of March 2024 for zero average daily consumption issue.</p> <p><u>CTCS</u> A QA process was implemented on 01/11/2022, where a backup person checks that the CS data is correct then gives the final approval, however it was discovered in the recent audit in Feb of 2024, that stronger controls were required. We have immediately implemented a new change where we now have extra staff on to assist with the QA process. The CS Automation which is Phase 2 of the Switching Automation is currently scheduled for Quarter 4 of 2024.</p>	<p><u>CTCT</u> August 2024</p> <p><u>CTCS</u> Dec 2024</p>	

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 dispute 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 history report for the audit period was reviewed.

Audit commentary

The process to create RR and AC files is the same for transfer switches and switch moves and is documented in **section 4.4**.

CTCT

RR

CTCT issued 497 RR files for switch moves. 345 were accepted and 152 were rejected. For the sample of five acceptances and five rejections checked there was a genuine reason for CTCT's RR, and the read value recorded in SAP reflected the outcome of the RR process. The following exceptions were identified:

ICP	Event audit no	Event date	Update date	Issue
0000189070UNC52	RR-203203	21 July 2023	3 October 2023	The read type in SAP was recorded as E but should have been A.
0000515163DE4CF	RR-204624	25 July 2023	8 November 2023	
0253915910LC8C9	RR-204755	31 August 2023	13 November 2023	
0000538194NR644	RR-205560	6 October 2023	4 December 2023	The RR was not supported by at least two validated actual readings. The ICP was only supplied for three days, and one meter reader reading was received indicating the reading was lower than the gain read.

The switch breach history report recorded 37 late RRs for switch moves. I checked the ten latest which were delayed while CTCT obtained readings to confirm that the RR was required and determine the expected switch event reading, or while CTCT confirmed that the correct property had been switched in.

AC

Three switch move AC files where an NT was issued during the audit period were identified. All were accepted by CTCT, and the switches were later withdrawn.

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

CS files with estimated readings where no RR is issued

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

CTCS

RR

CTCS issued 14 RR files for switch moves. 12 were accepted and two were rejected. There was a genuine reason for the RRs and the read value recorded in DataHub and MADRAS reflected the outcome of the RR process.

No RR breaches were recorded in the switch breach history report.

AC

CTCS issued 15 AC files for switch moves. Six rejected the other trader's RR and nine accepted the other trader's RR. A sample of ten ACs were checked, and in all cases the readings in DataHub and MADRAS (for NHH settled ICPs) reflected the outcome of the RR process, and rejections were for valid reasons.

No AC breaches were recorded on the switch breach history report.

CS files with estimated readings where no RR is issued

Review of five transfer CS files with estimated reads where no RR was issued confirmed that the correct reading values were recorded in DataHub and MADRAS.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.11</p> <p>With: Clause 12 of Schedule 11.3</p> <p>From: 26-Sep-23</p> <p>To: 27-Nov-23</p>	<p>CTCT</p> <p>37 late RR breaches for switch moves.</p> <p>For three RRs SAP had an incorrect read type recorded.</p> <p>One RR was not supported by two actual reads and was accepted by the other trader.</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		
<p>Low</p>	<p>The controls are rated as strong and will mitigate risk to an acceptable level.</p> <p>The impact assessed to be low because the RRs were completed with sufficient time for revised submission information to be provided.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>37 late RR breaches for switch moves & one RR was not supported by two actual reads and was accepted by the other trader.</p> <p>Our RR procedure is robust and requires two verified readings before initiating the RR process. However, we sometimes face difficulties in accessing the meters and this leads to delays. We trigger the RRs as quickly as possible once we have two verified readings.</p> <p>We believe our procedure is effective in reducing late RRs and to ensure two actual reads are obtained but access issues can impact the result at times. We have also advised our agents to make their best efforts to obtain two verified reads for the RRs.</p> <p>For three RRs SAP had an incorrect read type recorded.</p> <p>We have provided refresher training to our agents to ensure the correct read type is recorded when corrections are made after the RR process.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Identified</p>

Preventative actions taken to ensure no further issues will occur	Completion date	
<u>CTCI</u> Contact has provided further training to our users to ensure correct read type is used and best efforts are made to gather two verified reads for RR process.	<u>CTCI</u> 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 three 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

CTCT did not request any HH switches during the audit period. All new HH ICPs use the CTCS participant code.

I checked the metering category for the 13,248 transfer switch ICPs and 35,445 switch move NTs issued during the audit period and found none had metering categories of three or above.

CTCS

The NT process is discussed in **section 4.1**, and is the same for transfer switches, switch moves and HH switched.

79 NTs were issued for gaining trader switches, all had metering category three or above and the correct switch type was selected. No switch move or transfer switch NTs had metering categories of three or above.

No PT breaches were recorded on the switch breach history report.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.3

Code related audit information

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

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

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

Audit observation

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

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

Audit commentary

CTCT

No HH AN files were issued by CTCT during the audit period, and no breaches were recorded for HH AN files.

CTCS

Incoming NT files are retrieved from the registry and loaded into Salesforce every two hours during business hours. The incoming NTs are displayed on the switch loss dashboard with details of the NT received date, proposed switch date, metering category and proposed switch type.

For HH and transfer switches, CTCS requests confirmation that the ICP can switch out from their white label customer or the solutions team depending on which brand supplies the ICP. If approval is not received within 24 hours, the AN is released and the withdrawal process is used to cancel the switch if necessary. CTCS selects the AN files to be released within Salesforce, and Salesforce automatically generates the AN. Outgoing AN files are pushed to the registry using a SQL script every two hours during business hours.

Exceptions are generated and viewed in Salesforce where an outgoing AN file cannot be automatically created and sent. Users check these exceptions daily and resolve any issues. The switch breach history report is monitored twice daily to identify AN files which are close to falling due.

79 HH AN files were issued during the audit period. All had the AA (acknowledge and accept) or AD (advanced metering) response code correctly applied and compliant event dates. The switch breach history report did not record any breaches for HH switches.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.3

Code related audit information

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

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

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

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

Audit observation

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

Audit commentary

CTCT

CTCT did not request any HH switches during the audit period, and the switch breach history report did not record any late HH CS files.

CTCS

Incoming AN files are retrieved from the registry and loaded into Salesforce every two hours during business hours. They appear on the Gain acknowledged view in Salesforce for action. Outgoing HH CS files are generated in Salesforce and then pushed to the registry using a SQL script every two hours during business hours.

Exceptions are generated and viewed in Salesforce where an outgoing AN file cannot be automatically created and sent. Users check these exceptions daily and resolve any issues. The switch breach history report is monitored twice daily to identify AN files which are close to falling due, and registry acknowledgement files are monitored with an email provided to the operations team after each switching file transfer to the registry.

The CS file content was as expected for all 76 HH CS files issued during the audit period, and the switch breach history report did not record any late HH CS files.

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));*
 - 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.

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

Audit commentary

CTCT

NW

CTCT usually becomes aware that an NW is required upon notification from their customer, or confirmation of a metering or switch type issue. Once confirmed, a service order is raised in SAP which specifies the type of withdrawal which is used to determine the withdrawal reason code. To ensure NW advisory codes are correctly applied, the switching team have been advised that only certain team members should apply the DF (date failed) code. The Kotahi Matou team were not all aware of this change of policy, and some staff applied the DF code where the switch event date was not more than ten business days in the future. The switching team plans to discuss this with the Kotahi Matou team to prevent recurrence.

The NW service orders are actioned by a robot for UA (unauthorised account) and CX (customer cancellation) withdrawals, by creating a standard email for the other trader and issuing a NW file to the registry. Any replies to emails issued by robots are reviewed by an operations team member. If the robot cannot complete the NW process for any reason, or the withdrawal is for other reasons the service request will be allocated to the operations team for processing. Typically, the robot cannot complete withdrawals where service order information is incomplete, or the ICP has been supplied for more than two months. An operations team member will access the allocated service orders from the SAP interaction centre and confirm the correct code before triggering the NW file to be sent.

When an AW response is received from the other trader, a BPEM is created in SAP. BPEMs where the NW is accepted are automatically processed by the robot. BPEMs where the NW is rejected are reviewed by an operations team member to determine whether further action is required.

CTCT issued 3,097 NW files, and 5295 (17.08%) of those files were rejected. The content of 24 NW files was compared to details in SAP, and I identified the following exceptions.

ICP	Event audit no	Update date	Applied code	Code with best fit
1002064517LC375	NW-1150467	20 November 2023	Customer cancellation	Customer error
0000180679WE4E4	NW-1114188	6 April 2023	Date failed	Customer error
0005141818RN242	NW-1114687	12 April 2023	Date failed	Customer error
0001810833EN8BB	NW-1149966	15 November 2023	Date failed	Customer error
0000524394NRF22	NW-1142939	4 October 2023	Withdrawn on metering issue	Customer error
0000013161TR48E	NW-1133363	8 August 2023	Unauthorised switch	Customer error
0000032897NT022	NW-1149633	14 November 2023	Unauthorised switch	Customer error
0007210100RN0E0	NW-1129836	18 July 2023	Losing retailer not current retailer	Customer cancellation
1002064517LC375	NW-1150467	20 November 2023	Customer cancellation	Wrong switch type

The errors generally occurred because the wrong withdrawal type was recorded in the service order. For the date failed errors, the Kotahi Matou team had continued to apply the date failed code where dates were incorrect instead of only where the date was more than ten business days in the future.

The switch breach history report recorded:

- 45 SR breaches where the NW arrival date is more than 10 business days after the initial NW for the same trader requesting the withdrawal, and
- 151 NA breaches where the NW arrival date is more than two calendar months after the CS actual transfer date.

I checked the ten latest SR breaches and 15 latest NA breaches and found the delays were caused by late notification that the withdrawal was required from the customer, and delays while CTCT investigated whether the NW was required, including for suspected wrong properties.

AW

A BPEM is generated when an NW file is received. These are worked through manually and accepted or rejected, then the BPEM is closed by the user. Another user is responsible for reviewing the switch breach report each morning and afternoon and checking any ICPs close to breaching which are followed up with the user responsible.

395 (12.28%) of the 3,216 AWs issued by CTCT were rejections. I reviewed a diverse sample of 22 rejections by CTCT (including at least three for each NW advisory code) and found they were validly rejected based on the information available at the time.

The switch breach history did not record any AW breaches.

CTCS

NW

CTCS usually becomes aware that an NW is required upon notification from their customer, or confirmation of a metering or switch type issue. ICPs at “inactive - new connection in progress” or 1,6 “inactive - ready for decommissioning” statuses are double checked to confirm the NW is required before being issued. Once confirmed, a NW is raised in Salesforce with the appropriate advisory code and an email is issued to the other trader explaining the reasons for the NW.

The NW’s progress is tracked in a spreadsheet, and using the Outlook inbox to make sure that a response is received from the other trader and correctly actioned.

CTCS issued 110 NW files, and 24 (21.82%) of those files were rejected. The content of 12 NW files (including at least three or all for each NW advisory code) were compared to details in Salesforce. All contained correct withdrawal advisory codes.

The switch breach history report did not record any NW breaches.

AW

Incoming NW files are identified on the switching dashboard and tracked using a spreadsheet. Each incoming NW is reviewed to determine whether it should be accepted to rejected. The switch breach history report is monitored twice daily to identify AW files which are close to falling due, and registry acknowledgement files are monitored with an email provided to the operations team after each switching file transfer to the registry. If a failed AW file was not identified as part of this check, it would remain on the switch breach history report until the registry is correctly updated.

16 (27.12%) of the 59 AWs issued by CTCS were rejections. I reviewed a diverse sample of ten rejections by CTCS (including at least three for each NW advisory code), and confirmed they were rejected based the information available at the time the response was issued.

The switch breach history report did not record any AW breaches.

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: 24-Jul-23</p> <p>To: 27-Nov-23</p>	<p>CTCT</p> <p>45 SR breaches.</p> <p>151 NA breaches.</p> <p>Nine out of 24 NW files checked had incorrect NW advisory codes applied.</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 moderate overall.</p> <ul style="list-style-type: none"> • The sample of NWs assessed for accuracy focussed on rejected NWs, which were more likely to be incorrect, but there is room for improvement. • The NW breaches were caused by delays in receiving information to confirm that the withdrawal was required. <p>The audit risk rating is low because impact on settlement and participants is minor. Revised reconciliation data will be provided through the revision process.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>45 SR breaches & 151 NA breaches.</p> <p>Contact triggers the withdrawals as soon as possible when made aware and supporting information is available. Some withdrawals are late as it requires complex investigation such as meter verification, switch correction, and/or site visits to ensure accurate ICPs. This affects the NW process timeline but some of these late withdrawals are unavoidable to ensure accuracy of customers billing and submissions.</p> <p>Nine out of 24 NW files checked had incorrect NW advisory codes applied.</p> <p>Further training has been provided to staff to ensure correct withdrawal codes are applied in the future.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCT</u></p> <p>Contact has provided further training to our agents to ensure correct withdrawal codes are selected when NWs are triggered.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	

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

Contact's policy regarding the management of meter reading expenses is compliant for all participant codes.

The meter readings used in the switching process are validated meter readings or permanent estimates. All CS and RR event readings checked for CTCT and CTCS were confirmed to be correct. Incorrect event read types are recorded as non-compliance in **section 9.1**.

Audit outcome

Compliant

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

Win-back processes were discussed. The event detail report was analysed to identify all withdrawn switches with a CX code applied within 180 days of switch completion, and a sample were checked to determine compliance.

Audit commentary

CTCT

No win-back activity is undertaken by CTCT.

Review of the event detail report identified 149 NWs issued for switch losses where CTCT was the losing trader within 180 days of switch completion with a CX withdrawal code. One of these NWs was rejected. I checked a sample of ten of these withdrawals including the rejected request, and confirmed they were initiated by the customer, and no win-back activity occurred.

CTCS

No win-back activity is undertaken by CTCS, and no NW CX files were issued during the audit period.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

No activity occurred for CTCX during the audit period.

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 shared unmetered load were discussed. The registry lists and AC020 audit compliance reports were reviewed to identify all ICPs with shared unmetered load and assess compliance.

Audit commentary

CTCT

Additions and changes to shared unmetered load are monitored as part of CTCT's validation processes discussed in **section 3.7**. 292 ICPs had shared unmetered load indicated by the distributor. The loads were confirmed to be correct within 0.1 kWh of the distributors value apart from ICPs 0000020828WE426 and 0067025054WE352 which had shared unmetered load calculation errors which were corrected in SAP and the registry upon discovery during the audit. Revised submission data will be provided through the wash up process.

I rechecked previous audit unmetered load exceptions for ICP 0000018605WEC0F and found the ICP switched out before it could be corrected.

CTCS

Additions and changes to shared unmetered load are monitored as part of the validation processes discussed in **section 3.7**. No ICPs have shared unmetered load.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 5.1 With: Clause 11.4</p> <p>From: 01-Dec-22 To: 11-Jan-24</p>	<p>CTCT</p> <p>ICPs 0000020828WE426 and 0067025054WE352 had shared unmetered load calculation errors which were corrected in SAP and the registry upon discovery during the audit. Revised submission data will be provided through the wash up process.</p> <p>Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>The controls are currently rated as moderate, as there are good validation processes in place to detect and resolve unmetered load errors. A small number of errors were identified during the audit analysis of all ICPs with unmetered load.</p> <p>The audit risk rating is low because the impact on settlement is minor and revised submission data will be washed up.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Identified exceptions were resolved within SAP and the registry during the audit.</p> <p>Contact has developed a new EMT capable of identifying UML exceptions. We are providing further training to the users that will have access to this tool to ensure an emphasis is placed on accurate UML calculations and precise data entry into SAP.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Cleared</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Please refer to the actions taken to resolve section</p>			

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

The processes to manage ICPs over the unmetered thresholds were discussed. The registry lists and AC020 audit compliance reports were reviewed to identify all ICPs with unmetered load over 3,000 kWh per annum and assess compliance.

Audit commentary

CTCT

16 ICPs have unmetered load between 3,000 and 6,000 kWh per annum and all were confirmed to have a predictable load type.

ICP 0000513944CEF86 is an unmetered weather station which switched in on 1 January 2023. The trader unmetered load details inherited from the previous trader (CTCS) indicated that the load was 782 W connected 24 hours. The recorded details were consistent with the network's records at the time and indicated that the load exceeded the 6,000-kWh threshold. CTCT investigated the load with the network and customer who have confirmed that the ICP was lived in with 480 W connected 24 hours, equivalent to 11.52 kWh per day or 4,205 kWh per annum. The ICP's load is predictable, and it is within the 3,000 to 6,000 kWh threshold for predictable unmetered load.

The network has updated their unmetered load details on the registry, and CTCT has updated their trader unmetered load details in SAP and the registry and provided revised submission data.

CTCS

As part of the fortnightly unmetered load checks CTCS identifies any ICPs consuming more than 3,000 kWh per annum. All ICPs with loads over 3,000 kWh per annum are DUML ICPs.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

- *within 20 business days, commence corrective measure to ensure it complies with Part 10*
- *within 20 business days of commencing the corrective measure, complete the corrective measures,*
- *no later than ten 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,*

- *the details of the corrective measures that the retailer proposes to take or is taking to reduce the unmetered load.*

Audit observation

The processes to manage ICPs over the unmetered thresholds were discussed. The registry lists and AC020 audit compliance reports were reviewed to identify all ICPs with unmetered load over 6,000 kWh per annum and assess compliance.

Audit commentary

CTCT

As discussed in **section 5.3**, no ICPs have unmetered load which is genuinely over the 6,000-kWh threshold.

CTCS

As part of the fortnightly unmetered load checks CTCS will identify any ICPs consuming more than 3,000 kWh per annum and ensure that they are of an approved load type, are DUML or are metered. All ICPs with loads over 3,000 kWh per annum are DUML ICPs.

Audit outcome

Compliant

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

Code reference

Clause 11 Schedule 15.3, Clause 15.37B

Code related audit information

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

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

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

Audit observation

The processes to manage distributed unmetered load were reviewed.

Audit commentary

CTCT

CTCT does not supply any DUML ICPs.

Exemption No. 185 allows exemption to clause 11 of schedule 15.3 of the Electricity Industry Participation Code 2010 in respect of creating a DUML database for ICP 0001183605HB0B0 which has under verandah lights consuming 3.7 kWh per day. This exemption expires on the date on which Contact no longer has responsibility as the trader for this ICP on the registry.

CTCS

All Contact DUML ICPs are supplied using the CTCS code. DUML audits for all databases were conducted by Veritek and Provera.

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 DUML load and volumes.

Some DUML customers are providing changes tracked at a daily level and revisions are completed where required. CTCS is working with those customers who are still providing a snapshot of the DUML database to derive submission from, to get reporting which tracks changes at a daily level.

Database	Trader	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)	Database indicative kWh +=over -=under Variance PA
Central Otago DC	CTCS	1 August 2024	No	Yes	Yes	Yes	No	Yes	Yes	No	No	-53,500
Christchurch CC-Mainpower	CTCS	1 October 2024	No	Yes	Yes	Yes	No	Yes	Yes	No	No	Accurate
Christchurch CC-Orion	CTCS	16 December 2024	No	Yes	Yes	Yes	No	Yes	Yes	No	No	-637,200
Christchurch CC Traffic Lights	CTCS	18 April 2024	No	Yes	Yes	No	No	Yes	No	No	No	Accurate
Christchurch International Airport Limited	CTCS	21 September 2024	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Accurate
New Plymouth DC	CTCS	1 December 2024	No	Yes	Yes	Yes	No	Yes	Yes	No	No	-66,400
NZTA Mainpower (Waimakariri)	CTCS	Due 18 February 2023 extended to end of July 2023 CTCS is working with the database owner to complete this audit	No	Yes	No	No	No	Yes	Yes	No	No	+25,300
Tasman NZTA	CTCS	1 May 2024	No	Yes	Yes	No	No	Yes	Yes	No	No	+8,600
Waimakariri DC	CTCS	1 December 2024	No	Yes	Yes	No	No	Yes	Yes	No	No	Accurate

The Christchurch CC Orion and New Plymouth DC DUML audits showed an accuracy difference of more than 50,000 kWh per annum, and the comments from those audits indicate that the issues will be resolved.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 5.4</p> <p>With: Clause 11 of schedule 15.3</p> <p>From: 01-Apr-23</p> <p>To: 28-Feb-24</p>	<p>CTCS</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 five of the databases managed.</p> <p>The DUML audit for NZTA Mainpower was due on 18 February 2023 which was extended to 31 July 2023 but has still not been completed.</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		
<p>High</p>	<p>The controls in place mitigate risk most of the time, but there is some room for improvement.</p> <p>There is a high impact based on the estimated under and/or over submission for the inaccurate databases. CTCS is working with the database owner to have the NZTA Mainpower audit completed.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCS</u></p> <p>Discrepancies found in audits are discussed with clients promptly and work plans created to resolve discrepancies.</p>		<p><u>CTCS</u></p> <p>Ongoing</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCS</u></p> <p>Simply Energy is working with councils to review their processes to ensure their database extracts are as accurate as possible. We are working with CCC and CoDC to help implement check meters to resolve the over submission caused by dimming. Simply Energy have been continually chasing NZ Streetlighting to complete the transfer of NZTA lights to NZTA's system and have also kept the EA updated. Assurance has been received from NZ Streetlighting that the transfer will be complete by June 2024.</p>		<p><u>CTCS</u></p> <p>Ongoing</p>	

6. GATHERING RAW METER DATA

No activity occurred for CTCX during the audit period.

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 audit compliance reports 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.

All "active" metered ICPs have an MEP recorded. The audit compliance report recorded 98 "active" ICPs where the metering category was 9 or blank, indicating that no meters were present, and the unmetered flag was set to no. 55 ICPs had MEP nominations made and accepted and were awaiting meter asset data on the registry, and 43 ICPs had metering details populated on the registry after the report was run.

The audit compliance report identified six "new" ICPs which did not have an accepted MEP nomination within 14 business days. Three became metered after a period with an unmetered builder's temporary supply and the MEP nominations were on time, and three invalidly appeared on the report and did have an MEP nomination made and accepted within 14 business days of the "active" date. ICP 0005265000ALF50 was a backdated new connection, and the MEP nomination was not processed until the ICP became "active".

Submission by subtraction

Exemption No. 191 allows submission by subtraction for the Ohaaki substation ICP 0000032431HR99C. This exemption will expire at the close of 30 June 2024, or the completion date of a major upgrade to the

Ohaaki substation. I walked through the submission process for ICP 0000032431HR99C for January 2024, and confirmed that the volumes were calculated and reported correctly.

Exemption No. 2023 which allowed submission by subtraction for ICP 0000880392WEA92 is no longer required, because the ICP has switched out.

ICP 1001157629CK617 is CTCT's only category three or higher ICP, which is not one of their generation sites. The ICP was split into three tenancies by the property owner. Two category one metered low voltage connections (ICP 1001158552CK7FD – IECD 26 May 2016 and ICP 1001156589CKCAB – IECD 27 January 2015) were added downstream of ICP 1001157629CK617 resulting in consumption for these two metered ICPs being recorded on the metering for ICP 1001157629CK617, as well by their own metering.

The issue needs to be physically resolved so that ICPs 1001158552CK7FD and 1001156589CKCAB are not downstream of ICP 1001157629CK617. CTCT is agreeing a solution with Wellington Electricity and the customer, which is likely to involve decommissioning the ICPs and replacing them with new ICPs with metering appropriate to the size of the connection, and ensuring the installations are wired so that no ICP is downstream of another ICP.

In the meantime, the HHR volumes are submitted under ICP 1001157629CK617 based on readings provided by Blue Current Assets NZ Limited and the traders for ICPs 1001158552CK7FD and 1001156589CKCAB. Non-compliance is recorded below and in **section 12.7**.

Distributed Generation

Contact validates distributed generation information.

- A monthly databricks report identifies all ICPs with distributed generation. The report shows installation type discrepancies between SAP and the registry, and instances where the profile is inconsistent with the installation type. Where a job for import/export metering has been raised, no action is taken and where no job has been raised, the exception is passed to the distributed generation team to arrange meter installation. Any ICPs with start dates within the previous month are carefully checked to ensure that their profile and metering details are correct.
- CTCT occasionally runs the databricks fuel type profile check which is filtered on fuel type to ensure that the profile and fuel type are consistent.

A weekly report from ORB is used to track distributed generation metering installations and jobs which cannot be completed are followed up.

I confirmed that CTCT'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. This is recorded as non-compliance in **section 2.1**.

8,312 "active" ICPs with generation listed by the distributor were identified on the registry list. The AC020 audit compliance, event detail, registry list and meter installation details reports were reviewed to determine compliance:

Generation recorded by the distributor and an I flow register with no generation compatible profile	There were 17 NHH ICPs with generation recorded by the distributor and an I flow register where CTCT did not record a compatible generation profile on the registry. 15 were timing differences and the profile was updated to include PV1 by the time the audit was completed. ICPs 0001145233ML9CE and 1000606703PC7AA are being investigated to confirm whether generation is present before the profile is updated.
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<p>Generation recorded by the distributor with no settled I flow register - HHR</p>	<p>71 ICPs with HHR profile have generation indicated by the distributor and no settled I flow register.</p> <ul style="list-style-type: none"> • 22 ICPs were confirmed not to be generating and do not require I flow metering. • 30 ICPs are being checked with the customer to confirm whether generation is present, and if there is installation of generation metering will be arranged. • 17 ICPs had EG meters installed after the report was run, and another two ICPs have EG meter installation jobs in progress. <p>I checked all 3,262 ICPs with settled I flow meters on the November 2023 HHR aggregates report. 3,239 had I flow volumes reported, and 21 ICPs were excluded from the report due to timing differences for backdated switches and meter changes. ICP 0000277231MP9F7 had generation metering data available from 6 June 2023, but needs to be set up correctly in SAP before submission data can be provided. This is recorded as non-compliance below and in sections 2.1, 12.2 and 12.7.</p>
<p>Generation recorded by the distributor with no settled I flow register - NHH</p>	<p>81 ICPs with NHH profiles have generation indicated by the distributor and no settled I flow register.</p> <ul style="list-style-type: none"> • Six ICPs were confirmed not to be generating and do not require I flow metering. • 55 ICPs are being checked with the customer to confirm whether generation is present, and if there is installation of generation metering and an application will be completed. • 12 ICPs had EG meters installed and profile updates after the report was run, three have EG installation jobs in progress, and another two ICPs had EG meter installation jobs declined due to incorrect addresses and CTCT is working with the customers to confirm the correct address. • ICP 0005923301RNFD9 is to have a notification of gifting prepared. • ICP 0000163355UNC76 is a vacant installation, and there is no customer to liaise with. • Paperwork for ICP 0000054538HB1F4 is being followed up with the network and MEP.
<p>Generation profile recorded but no generation details recorded by the distributor</p>	<p>190 “active” ICPs had profiles indicating generation was present, but no generation was recorded by the distributor.</p> <ul style="list-style-type: none"> • 184 ICPs had settled I flow registers, and CTCT’s profiles appear to be correct. • One ICP was updated to installation type B by the distributor during the audit. • Five ICPs were confirmed not to have generation and CTCT corrected the profiles to remove PV1 during the audit.
<p>Generation profiles inconsistent with the distributor fuel type</p>	<p>Where generation profiles were recorded, they were consistent with the generation fuel type apart from 237 ICPs with PV1 profile where the distributor had recorded a generation fuel type other, and one where the distributor recorded a fuel type of wind. I checked the wind generation ICP and a sample of 35 ICPs with a generation fuel type of other and found all had the correct profile assigned.</p>

Where no payment will be received from the clearing manager for generation exported to the grid, notification of gifting is required to be provided to the reconciliation manager. During the audit I found instances where notification of gifting was expected to be provided but had not been, and also situations where CTCT was unable to arrange installation of generation metering in a timely manner. I repeat the previous audit recommendation to review when and how gifting should occur, and how the

reconciliation team will be notified so that they can provide the required notice. Gifting could be considered where CTCT has difficulty obtaining consent for generation metering to be installed.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCT</p> <p>Notification of gifting</p>	<p>CTCT</p> <p>Review processes for notification of gifting to provide guidance on when gifting should occur, and how the reconciliation team will be notified so that they can provide the required notice.</p>	<p>A new exception type will be added into the EMT to address instances where I Flow exists on the Registry without corresponding I Device installed in SAP. As instances are identified, the respective teams will investigate and take the necessary corrective actions.</p> <p>We plan to implement a process to review ICPs where notification of gifting is required.</p>	<p>Identified</p>

Bridged meters

There were 25 ICPs where the meter had been bridged but not unbridged. Service orders were raised for all ICPs except those which switched away or were disconnected. Corrections to capture the bridged consumption will be made once the service orders are complete.

There were 133 ICPs where the meter had been bridged and unbridged during the audit period. 11 ICPs did not have corrections processed, and one ICP had a correction processed but the wrong read type was applied. The affected ICPs are listed in **appendix 15.2**.

The existence of bridged meters is recorded as non-compliance below.

CTCS

Metering installations installed

CTCS creates MEP nominations for all MEPs when the ICP moves to 1,12 “inactive - new connection in progress” status, or when a field services job is nominated.

The audit compliance report recorded six “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 had an MEP nomination made and accepted and were awaiting meter asset data.

The audit compliance report did not identify any new connections where an MEP nomination was not accepted within 14 business days.

Submission by subtraction

No submission information is determined by subtraction.

Distributed Generation

When a new meter with I flow metering is installed, CTCS will check the registry to determine whether the installation type is B or G. If it is L, they will ask the network to confirm whether generation is installed and create a Salesforce case which will remain open for monitoring until a response is received. Once generation is confirmed, the ICP’s profile is updated. If possible, the ICP will be given HHR submission type and profile. If the metering is not HHR or AMI, or regular readings are not being received it will be put on NHH submission type with RPS PV1 profile.

When checking late trader updates in **section 3.3**, I found that some profile changes to RPS PV1 were seven to 19 business days late because the profile change was not processed at the time that the I flow metering was installed. CTCS provided further training to staff to ensure that updates are processed more promptly in the future.

Until new datawarehouse reporting is developed, CTCS completes a quarterly check of ICPs with distributed generation using a registry list report and event detail report. Checks are completed to determine whether the ICP is generating, I flow metering is installed and the profiles are correct.

The Salesforce dashboard reports NHH ICPs with installation type B, including their profile. This is checked to ensure that generation ICPs have the correct profile assigned.

177 “active” ICPs with generation listed by the distributor were identified on the registry list. The AC020 audit compliance, event detail, registry list and meter installation details reports were reviewed to determine compliance:

Generation recorded by the distributor and an I flow register with no generation compatible profile	There was one ICP which had a timing difference, and the incorrect profile was detected and corrected prior to the audit.
Generation recorded by the distributor with no settled I flow register - HHR	<p>154 of the 156 HHR settled ICPs with distributed generation indicated by the distributor have settled I flow meter registers and I flow volumes are being submitted, or the ICPs appear on the gifting register. The other two ICPs were checked:</p> <ul style="list-style-type: none"> • ICP 0000018295HB9A7 is confirmed not to be generating yet, and the customer has applied to the network for approval to install generation, and • ICP 1001242432LC575 is under investigation; the network believes that generation is installed, and CTCS will confirm this with the customer and arrange for I flow metering to be installed if necessary. <p>I checked all 155 HHR settled ICPs with distributed generation indicated by the distributor which appeared on the November 2023 HHR aggregates report. 151 had I flow volumes reported or appeared on the gifting register, and a further four were timing differences where I flow metering was installed or the MEPs records were corrected after November 2023.</p>
Generation recorded by the distributor with no settled I flow register - NHH	All NHH settled ICPs with distributed generation indicated by the distributor have settled I flow meter registers apart from an unmetred residual load ICP, which does not require metering.
Generation profile recorded but no generation details recorded by the distributor	All ICPs with generation profiles also have generation recorded by the distributor.
Generation profiles inconsistent with the distributor fuel type	All generation profiles applied were consistent with the distributor’s fuel type.

Bridged meters

No meters were bridged during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 6.1 With: Clause 10.13</p> <p>From: 01-Apr-22 To: 28-Feb-24</p>	<p>CTCT</p> <p>Subtraction is used to determine the HHR load for ICP 1001157629CK617 until the issues causing the load for ICPs 1001158552CK7FD and 1001156589CKCAB to be metered through it are resolved.</p> <p>ICP 0000277231MP9F7 has generation metering data available from 6 June 2023, but needs to be set up correctly in SAP before submission data can be provided. There was no I flow submission data provided for January 2024.</p> <p>Five ICPs with PV1 profile were confirmed not to have generation and CTCT corrected the profiles on discovery during the audit.</p> <p>While meters were bridged, energy was not metered and quantified according to the code for 158 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	
<p>Low</p>	<p>Controls are rated as moderate as they are sufficient to reduce the risk most of the time. There a good validation processes in place for distributed generation and bridged meters. Most exceptions were identified prior to the audit.</p> <p>The audit risk rating is low.</p> <ul style="list-style-type: none"> • 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. • CTCT has processes to install compliant metering where distributed generation is identified. 	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>1001157629CK617 – Contact is working with the customer and network to resolve the issue. It requires physical work at site and setting up new ICPs. Once this work is completed, then Contact will work with the network to decommission these old ICPs.</p> <p>ICP 0000277231MP9F7 – We are currently working with the MEP to resolve the issue. Service order is raised with the MEP to investigate the configuration of the meter. Once confirmed, both registry and SAP will be updated to ensure accuracy of the submission data.</p> <p>Exceptions with PV1 profiles were resolved during the audit.</p>	<p><u>CTCT</u></p> <p>Apx:30.04.2024</p>	<p>Identified</p>

Preventative actions taken to ensure no further issues will occur		
<u>CTCI</u> Contact is working with MEPs and Network to resolve the current exceptions identified in the audit.	<u>CTCI</u> Ongoing	

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

Code reference

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

Code related audit information

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

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

The participant responsible for the metering installation must:

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

Audit observation

The NSP table was reviewed to confirm 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

CTCT

CTCT is responsible for the GIPs shown in the table below. Accucal updates meter certification changes directly, and the timeliness of meter recertifications is closely monitored by the generation operations team.

All grid connection points CTCT is responsible for had current certification recorded on the network supply point (NSP) table, on 21 December 2023 when the table was reviewed. Five GIPs had meter certification expiry date changes during the audit period, and the NSP table was updated on time.

New GIP TAB2201CTCTGG was created with a start date of 20 June 2023. Information on the design of the metering installation was provided to the grid owner more than three months before the start date, and the NSP table was updated on time.

Responsible party	Description	NSP	MEP	Previous certification expiry date (if different)	Certification expiry date
CTCT	CLYDE	CYD2201CTCTG	ACCM	2 December 2023	1 September 2025
CTCT	OHAAKI	OKI2201CTCTG	ACCM	5 August 2023	7 March 2026
CTCT	POIHIPI	PPI2201CTCTG	ACCM	11 June 2023	6 June 2026
CTCT	ROXBURGH	ROX1101CTCTG	ACCM		12 May 2025
CTCT	ROXBURGH	ROX2201CTCTG	ACCM		22 July 2024
CTCT	STRATFORD	SFD2201CTCTG	ACCM		28 June 2024
CTCT	TAUHARA	TAB2201CTCTGG	ACCM		25 October 2026
CTCT	TE MIHI	THI2201CTCTG	ACCM	22 October 2023	16 October 2026
CTCT	WHIRINAKI	WHI2201CTCTG	ACCM		7 October 2025
CTCT	WAIRAKEI	WRK2201CTCTG	ACCM	15 July 2023	6 October 2025

CTCS

CTCS is not responsible for any GIPs.

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 audit compliance 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, and/or the control device was appropriately certified.

Audit commentary

CTCT

Review of the registry list with history showed that CTCT has used profiles requiring certified control devices including E08, E11, E13, E24, TOC TON, T07 T23, and T08 T24.

The AC020 audit compliance report identified 3,434 ICPs with profiles which require AMI or HHR metering, or a certified control device, where the control device was not certified. 2,859 of those had HHR certification or communicating AMI meters, leaving 575 genuine exceptions which had NHH non-AMI metering with no certified control device.

CTCT's reconciliation process applies RPS (using the force RPS process) if the ICP metering does not meet the requirements of the profile. CTCT 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. I checked submission data for a sample of five ICPs to confirm the process works as described.

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 575 ICPs submitted as RPS which have controlled profiles recorded on the registry.

CTCS

Review of the registry list with history found CTCS did not use any profiles requiring certified control devices during the audit period.

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 leads 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 for bridged and defective meters are discussed in **section 2.1**.

CTCT

I reviewed 168 examples of potential defective meters, including:

- 25 ICPs where the meter had been bridged but not unbridged,
- 133 ICPs where the meter had been bridged and unbridged, and
- ten ICPs where the meter was suspected to be stopped or faulty.

Service orders were raised to notify the MEP for all ICPs except those which switched away or were disconnected before notification could be provided.

CTCS

I reviewed four examples of potential defective meters, and notification of the fault was provided by the MEP or CTCS advised the MEP of the fault using a service order.

Audit outcome

Compliant

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

Code reference

Clause 2 Schedule 15.2

Code related audit information

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

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

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

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

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

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

2(6) – The interrogation systems must record:

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

Audit observation

The data collection and clock synchronisation processes were examined. Contact's agents and MEPs are responsible for the collection of HHR and AMI data, and 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

CTCT supplies three ICPs with metering category three or higher:

- ICPs 0000018218HRB13 and 0000032431HR99C are geothermal generation ICPs with category five meters, which are read by CTCT using MV90, and
- ICP 1001157629CK617 has readings provided by Blue Current Assets NZ Limited, and compliance is recorded in their agent audit report; no clock synchronisation issues were identified during the audit period.

For generation ICPs, the MV90 server is synchronised every two hours, and prior to the commencement of any interrogation.

During each hourly 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 are greater than five seconds, but less than or equal to 60 seconds, the error is recorded in the events log as a failed task. A time synchronisation is still performed automatically, and the data is accepted as it is considered by CTCT 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. An investigation then occurs which may result in data correction. No clock errors outside the threshold or requiring correction occurred during the audit period.

MEPs monitor clock synchronisation for AMI ICPs, and this is covered as part of their audits. Each of the MEPs advise CTCT of clock synchronisation events. Emailed events are reviewed and actioned as required, but there are other events that are sent and not actioned. Non-compliance is recorded in **section 9.6**.

CTCS

Information used to determine volume information is provided to CTCS 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 CTCS. There were no examples of clock synchronisation events which required action during the audit period.

Audit outcome

Compliant

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

Code reference

Clauses 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 for readings and meter condition information was examined. Contact's processes to manage and review meter condition information and manage customer reads were checked.

Audit commentary

CTCT

Derivation of volume and labelling of readings

I traced a sample of data for 16 ICPs from the raw meter data files provided by MRS, BOPE, DELT, FCLM, IHUB, LMGL, MTRX, NGCM, SMCO and TRUM to SAP and confirmed that validated readings were derived from meter readings, and the data was recorded accurately.

MRS readings

MRS data collection processes were reviewed as part of their agent audits and found to be compliant.

MRS provide meter condition information with their read files. The meter condition information is imported into SAP and used to create BPEM events, which are directed to work queues in SAP for investigation and action.

I reviewed a sample of meter condition events during the audit period to determine if these had been identified and actioned. I found some issues:

- BPEMs are not always generated for meter condition events for vacant ICPs,
- BPEMs will not be generated for meter condition codes not expected to be used by MRS like smart meter tamper, and
- MRS will not send meter condition events to CTCT for ICPs which have a no read code applied.

Contact is considering whether BPEMs should be generated for vacant ICPs.

Meter condition issue	Outcome
Not sealed/seal broken	0000200438UNFD3 was identified as having a missing or broken seal but was not reported to Contact due to an error when the meter reader information was provided to CTCT. Because a "no read" code was entered, the meter lines (which contained the meter condition information were not sent to Contact. This will be followed up with MRS.
Suspect theft	0000106429UN04F is under investigation for potential suspect theft. ICP 1000497066PC4AB was sent to CTCT with a description of "smart meter tamper" and no BPEM was generated because this code is not expected to be used by MRS. A ticket has been raised to investigate this issue.
Blank screen	Seven ICPs with blank screens were reported by MRS. Because the ICPs were vacant and disconnected no BPEM was created, and no action was taken.
Meter stopped/faulty	Five ICPs were reported by MRS and had BPEMs generated.

Meter condition issue	Outcome
	<p>ICP 0000314136MP3EA had no action taken because it was vacant.</p> <p>ICP 0000504806NRA83 had a service order completed which confirmed it was consuming energy which was not being recorded. CTCT is waiting for the meter to be replaced and then will process a correction.</p> <p>ICP 1000003133BP4E3 had its meter replaced in November 2023, and a correction is in progress.</p> <p>The other two ICPs had their meters checked and were confirmed to be operating correctly.</p>
Broken glass/meter damaged	<p>One ICP was identified and underwent a meter replacement to resolve the issue.</p> <p>Two ICPs with water in the meter were identified and BPEMs were created. A service order was raised for one, but not the other because it was vacant.</p>
Meter removed/not replaced	<p>Five ICPs were reported by MRS, and four had BPEMs generated because they were “active” when the BPEM was created but one did not because it was vacant. No action was taken.</p>

No phase failure events were identified. ICPs with a phase failure indicator are likely to be AMI meters are not read remotely, and the MRS audit confirmed that meter readers are trained to identify and record phase failure events.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCT</p> <p>Meter condition BPEMs</p>	<p>CTCT</p> <p>Check the logic for creation of meter condition BPEMs, to ensure that they are consistently generated where meter condition events occur.</p> <p>Review the processes for vacant ICPs to determine whether action should be taken for certain types of meter condition events.</p> <p>Review the process for MRS to provide meter condition information where there is a “no read” and therefore no meter lines are provided in their read file.</p>	<p>ICT ticket 156859 has been raised to investigate why a BPEM wasn’t generated from meter condition code.</p> <p>We will review our current processes and explore options for improvement.</p> <p>We engaged with ADR and identified they sent both a no read and meter condition code in error. We have added this to the Operations Meeting agenda to discuss.</p>	<p>Investigating</p>

Customer reads

MRS does not record customer readings. Customers are advised to provide any customer readings directly to Contact through Contact’s app, by email or by phone. Customer readings are recorded as customer readings in SAP and are validated, after being transferred from the app or entered directly by a

CSR. 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.

If an actual reading is received after a customer reading and there is no open 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.

I checked a sample of ten customer readings and found all had the customer read type correctly recorded. Customer reads are not used in the historic estimate process, and there is no impact on settlement.

CTCS

Derivation of volume and labelling of readings

I traced a sample of read data from the raw meter data provided by Wells, Contact Energy, and each MEP to DataHub and MADRAS for NHH settled ICPs and confirmed that they were appropriately labelled, and validated readings were derived from meter readings.

Estimates provided by MEPs are recorded against a non-billing data stream and are not validated or used for submission. I checked an estimate provided by IntelliHUB which confirmed this.

Wells readings

Wells' data collection processes were reviewed as part of their agent audit and found to be compliant.

Wells provide meter condition events via reading files delivered via SFTP. Wells also provides an end of month report of all meter condition/no read codes captured for CTCS ICPs during the month which are imported into Salesforce and reported on using a Power BI report. The reporting is split between the operations team (meter condition codes) and the Data Management Analyst (no read codes). These reports are reviewed fortnightly to ensure high priority meter condition codes are investigated and actions taken, with notes also added to Salesforce for inclusion in any future field service orders. Meter reader notes are amended and sent to Wells as required.

A sample of four ICPs where meter condition codes were reported were reviewed. All were investigated and CTCS confirmed that no issue was present, or a service order was raised for the MEP to investigate.

Contact Energy readings

Contact Energy owns some sites in Central Otago, and their staff provide meter readings to CTCS. They take a photo of the meter and email it to CTCS along with any comments on the meter's condition. The readings are entered into DataHub as actual readings and are transferred into MADRAS.

Customer reads

Wells does not record customer readings. Customers may provide customer and photo readings directly to CTCS, which 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. "Customer actual" and "customer estimate" reads are not sent to MADRAS or used to calculate historic estimate.

A sample of ten customer reads were reviewed and found to be correctly classified in DataHub and not sent to MADRAS.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 6.6</p> <p>With: Clauses 3(1), 3(2) and 5 Schedule 15.2</p> <p>From: 01-Apr-23</p> <p>To: 28-Feb-24</p>	<p>CTCT</p> <p>Some meter condition events were not received by CTCT because no meter lines were provided for an unread ICP (ICP 0000200438UNFD3).</p> <p>Some meter condition events were not reviewed because no BPEM was generated because an unexpected meter condition code was provided (ICP 1000497066PC4AB) or the ICP was vacant (ICP 0000314136MP3EA).</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Three 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 moderate. Most meter condition events are received and generate BPEMs, which are appropriately actioned. Some meter events are not reviewed or acted upon.</p> <p>The impact is expected to be low based on the number of meter condition events identified. If meter condition is not received and reviewed, it is possible inaccurate and/or faulty meters may not be identified.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>0000200438UNFD3 - ADR sent a file with a no read code and a meter condition code, Contact didn't receive the meter condition code, and we wouldn't expect a meter condition code if the meter wasn't read. We are working with MRS to explore how we can prevent this from recurring.</p> <p>1000497066PC4AB - meter condition code received for smart meter tamper however no BPEM created, configuration indicates BPEM to revenue assurance should have been created, ICT ticket 156859 raised to investigate.</p> <p>0000314136MP3EA - MF19 BPEM for consumption investigation triggered from meter condition code in June 2023, was reviewed and found to be a vacant disconnected site.</p>		<p><u>CTCT</u></p>	<p>Investigating</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCT</u></p> <p>We reviewed the code logic for no read code 12 (unable to find meter) and implemented a change to also include generating a BPEM for scheduled reads (previously BPEMs were only generated for special reads).</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	

We will review our current meter condition event processes and explore options for improvement when a site is vacant.		
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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 MRS for CTCT and Wells for CTCS are applied correctly.

Application of readings for both codes was found to be compliant for generation of historic estimate (**section 12.11**) and generation of CS and RR files (**sections 4.3 to 4.4** and **4.10 to 4.11**).

CTCT

I walked through the process for NHH to HHR and HHR to NHH meter changes:

- 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, and
- the reverse applies for 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.

I reviewed a sample of four upgrades and five downgrades and found the one exception. ICP 0000010704TR2D7’s registry records are inconsistent with the profiles and submission types recorded in SAP. It has been submitted as HHR since 8 August 2023, but the registry shows a NHH record on 8 August 2023 which coincided with a pricing change in SAP. Compliance is recorded in this section because the upgrades and downgrades were correctly processed. Non-compliance is recorded in **section 2.1** because the registry records for ICP 0000010704TR2D7 are incorrect.

I re-checked incorrect profile changes identified during the previous audit and confirmed that they had been corrected.

CTCS

I walked through the process for NHH to HHR and HHR to NHH profile changes:

- for upgrades, the process is to “remove” the NHH meter from the registry and DataHub on the day before the meter change, and then the ICP becomes HHR all day on the day of the meter change, with AMI data on the day of the meter change recorded against the HHR register and the removal reading reflecting the midnight reading, and
- the reverse applies for a downgrade, with the ICP treated as HHR all day on the date of the removal, and the NHH meter installed the following day.

I checked a sample of five upgrades and five downgrades and confirmed that the profile changes occurred on actual or permanent estimate readings. The upgrade for ICP 0000052134HBB2B was made effective from the wrong date. The ICP was moved to HHR from 28 June 2023 consistent with the registry metering record, but should have been moved to HHR from 27 June 2023, consumption on the HHR register for the meter change date (estimated to be less than 5 kWh) was not reported.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.7 With: Clause 6 Schedule 15.2 From: 27-Jun-23 To: 28-Jun-23	CTCS The upgrade for ICP 0000052134HBB2B was made effective from the wrong date. The ICP was moved to HHR from 28 June 2023 consistent with the registry metering record, but should have been moved to HHR from 27 June 2023, consumption on the HHR register for the meter change date (estimated to be less than 5 kWh) was not reported. 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, the incorrect date was selected when processing the meter change manually. The audit risk rating is low, because the error resulted in less than 5 kWh of under submission.		
Actions taken to resolve the issue		Completion date	Remedial action status
CTCS Issue has been cleared.		CTCS N/A	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
CTCS Simply Energy have identified more resource is needed in this space and as a result, are proactively training another member		CTCS Aug 2024	

<p>of the team to assist in this space which will ensure better data quality - Operations Team Lead is also acting as Quality Control.</p> <p>Simply Energy are also working with their internal system administrator to improve current process in Salesforce to assist with timing and actions and to provide the Operations Team Leader visibility to assist and/or add resource where required.</p>	<p>Dec 2024</p>	
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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 ICPs unread during the period of supply were reviewed.

Audit commentary

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

The NHH meter reading frequency guidelines published by the Electricity Authority define “Exceptional circumstances” as meaning “circumstances in which access to the relevant meter is not achieved despite the reconciliation participant's best endeavours”. “Best endeavours” is defined as: “Where a reconciliation participant failed to interrogate an ICP as a result of access issues, the reconciliation participant had made a minimum of three attempts to contact the customer, by using at least two methods of communication”.

CTCT

ICPs read manually

When a manually read meter is unable to be read, the meter reader leaves a card in the letterbox explaining that a read was unable to be obtained and asking the customer to communicate with Contact. Cards are unable to be left where the meter reader cannot locate the property at all.

Meter readers are required to enter a no read reason code into their hand-held device where they cannot obtain a meter reading. These codes are imported into SAP. SAP BPEMs are generated when

certain no read reason codes are received, such as “wrong route” which has a MF07 BPEM raised so that the route can be followed up with the meter readers, and “view obscured” which has a MF13 BPEM raised so that a customised letter can be sent to the customer. BPEMs are not generated for some codes including “can’t find meter” (which is only generated for special reads), “gate locked”, or “key not provided”. Contact is investigating whether additional BPEMs should be created for other no read reason codes and has raised a ticket for the “can’t find meter” BPEM to be created for normal scheduled reads as well as special reads.

MRS also sends CTCT weekly lists of ICPs they have been unable to locate, and CTCT tries to obtain more information to update the location notes provided to the meter reader. CTCT also follows up no read codes indicating keys are missing or unavailable, to confirm that keys are secure.

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,
- a high priority (out of cycle) meter reading is requested if the process is still “active” 70 days after letter 2 is issued, and
- a BPEM 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 enters a permanent estimate if an actual reading cannot be obtained.

The letter content varies depending on which no read reason code is provided by the meter reader. If the meter is unread due to an access issue the letter asks for this to be resolved, and if the meter is unread due to a resourcing issue or Covid isolation rules preventing access the letter asks the customer to provide their own reading so CTCT can confirm whether their estimated readings are in line.

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.

AMI ICPs read by MEPs

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

A MF09 BPEM is generated in SAP if reads have not been received for 14 days in a row for an AMI meter, and the ICPs are expected to be moved to a NHH manual meter reading round. If the ICP also has a HHR billing product, the MEP will be advised and asked for a timeline to resolve the issue. Where the ICP is HHR settled, an update to the submission type or profile code is not always completed when changing the meter reading source. A recommendation to improve this process is made in **section 9.4**.

IHUB and Blue Current Assets NZ Limited also provide “no comms” reports weekly, listing ICPs which are not communicating. Bulk field services jobs are raised as workloads allow, and CTCT would eventually like to raise 100 jobs per week for non-communicating meters. These MEP reports are also used as a reference when investigating non-communicating meters.

Read attainment during the period of supply

CTCT provided a list of 16 ICPs not read during the period of supply, where the period of supply ended between 1 April 2023 and 20 December 2023. The ICPs were not read because of access issues, being unable to locate the premises or meter, MRS applying the forced complete code, the ICP not being allocated to a meter reading route, or a smart meter which was not communicating. Exceptional circumstances or best endeavours were proven for three of the ICPs, but not the other 13 ICPs¹³.

CTCS

ICPs read manually

Manual readings are provided by Contact Energy for its own ICPs in Otago, and Wells for other manually read ICPs.

A reminder is sent to Contact Energy when meter readings are required for its own Otago ICPs.

Wells meter readings are scheduled, and Wells provides monthly reporting on unread ICPs including the no read code, no read reason and last actual read date. CTCS filters this report to identify ICPs not read for three months, adds customer account and contact information and reviews the ICPs focussing on those which have never been read and the oldest last read dates.

The support team and/or business specialists are sent the report monthly and asked to attempt to resolve the issues preventing readings by contacting the customer at least three times using two different communication methods; and update the spreadsheet and Salesforce with notes on the action they have taken. Often customers have more than one ICP which has issues preventing readings, and a single email will be sent for all the customer's ICPs. Email templates are available but often not used because of the level of customisation required.

On business day eight of each month, the compliance team checks for new ICPs which have a last actual read date more than two months ago, so that any issues preventing reading can be followed up with Wells, the customer and/or MEP.

The meter read dashboard also reports on:

- manually read ICPs with data streams with no actual reads,
- manually read ICPs with no expected data streams, and
- manually read ICPs with no readings in the last four months.

AMI ICPs read by MEPs

SalesForce's Read KPI report shows NHH settled meters which have not been read for more than 40 days including AMI and manually read meters. The report is reviewed approximately fortnightly, and service orders are raised to attempt to resolve communication issues for AMI meters. If the issue cannot be resolved promptly the ICP will be moved to a Wells reading route.

The Senior Market Specialist checks HHR reconciled ICPs which have not received actual meter readings in the last seven days. These ICPs are followed up with the MEP to determine whether the issue preventing readings will be resolved and if the AMI flag will be corrected. Operations will change the profile, submission type and reading route to NHH once the MEP has updated the AMI flag or confirmed that the issue cannot be promptly resolved.

¹³ 0000406767HB5AE, 0000440659EN4D2, 0000552407TP003, 0000040433WEE0B, 0157663531LC002, 0000034216CHC0C, 0412905035LC9D0, 0000090165WWE6C, 0000230949ENAAE, 0184176891LC8E4, 0010000807TEBE4, 1001102335LC09C, 0001400230TGE40 and 0010378238EL8DB.

Read attainment during the period of supply

CTCT provided a list of seven ICPs not read during the period of supply, where the period of supply ended between 1 April 2023 and 29 December 2023, which did not have an actual read during the period of supply. The ICPs were not read because of access issues, being unable to locate the premises or meter or a smart meter which was not communicating. Two of the ICPs were vacant, and there was no customer to contact to resolve the issue. For the other five ICPs the best endeavours requirements were met.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 6.8</p> <p>With: Clause 7(1) and (2) Schedule 15.2</p> <p>From: 01-Apr-23</p> <p>To: 31-Dec-23</p>	<p>CTCT</p> <p>For 13 ICPs unread during the period of supply, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>The meter read compliance process begins after 130 days with no readings so it is unlikely compliance will be achieved where the period of supply is less than this.</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>Controls are rated as moderate as there are meter read compliance processes in place, but the automated meter read compliance report does not begin until the ICP has been unread for at least 130 days.</p> <p>The impact on settlement and participants is expected to be minor as good estimation processes are in place.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>7 of the 13 ICPs identified had not been supplied by Contact long enough for our compliance process to be effective.</p> <p>We reviewed all 13 ICPs to determine the best next step to gaining an actual read. 12 ICPs have switched out and 1 ICP is vacant.</p>		<p><u>CTCT</u></p>	<p>Investigating</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCT</u></p> <p>We are reviewing our compliance process to explore opportunities for improvement (earlier than the current 130-day period)</p>		<p><u>CTCT</u></p>	

We continue to work with MRS to improve attainment and resourcing to prevent 'force completes'.		
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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 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

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment.

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
May 23	350	69	2,189	99.06%
Jun 23	350	78	2,360	98.99%
Jul 23	353	61	1,961	99.16%
Aug 23	357	51	1,477	99.36%
Sep 23	358	55	1,530	99.34%
Oct 23	360	57	1,610	99.31%

Read attainment percentages are similar to the last audit.

I reviewed 20 ICPs not read in the 12 months ended 31 October 2023 to determine whether exceptional circumstances exist, and if CTCT had used their best endeavours to obtain readings. The ICPs were not read because of access issues, being unable to locate the premises or meter, MRS applying the forced complete code, the customer refusing access, or safety issues. Exceptional circumstances or best endeavours were proven for all ICPs checked.

Copies of the meter reading frequency reports to the Electricity Authority for August 2022 to January 2023 were provided, and the reports were sent within 20 business days after the end of the month and met the reporting requirements.

CTCS

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
May 23	138	31	69	95.11%
Jun 23	140	33	75	94.82%
Jul 23	136	29	69	95.16%
Aug 23	173	36	78	95.31%
Sep 23	164	29	52	96.52%
Oct 23	168	26	49	97.16%

I reviewed 20 ICPs not read in the 12 months ended 31 October 2023 to determine whether exceptional circumstances exist, and if CTCS had used their best endeavours to obtain readings. The ICPs were not read because of access issues including safety hazards and vacant ICPs, or the meter being removed.

- 14 of the ICPs were vacant or the best endeavours requirements were met.
- The best endeavours requirements were not met for ICPs 0005552039TPC33, 0016097015EL7E2, 0000024860CE242, 0004067806HB1B8 or 0000590170TE2E6 because only one attempt to resolve the issue by contacting the customer or arranging a special reading had been made per ICP.
- ICP 0001982631TG4C3 invalidly appeared as unread within the last 14 months because it is unmetered. Other unmetered ICPs do not appear on the report because they have month end readings entered, but because this ICP is not physically connected yet it has no readings entered. The ICP will be used for dimming and has been made “active” at the network’s request and insistence.

Copies of the meter reading frequency reports to the Electricity Authority for May 2023 to October 2023 were provided, and the reports were sent within 20 business days after the end of the month and met the reporting requirements.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 6.9 With: clause 8(1) and (2) Schedule 15.2.	CTCS For five of a sample of 20 ICPs unread in the 12 months ending 31 October 2023, exceptional circumstances did not exist, and the best endeavours requirement was not met. The meter reading frequency report includes solely unmetered ICP 0001982631TG4C3.

From: 01-Nov-22 To: 31-Oct-23	Potential impact: Medium Actual impact: Low Audit history: Three times Controls: Strong Breach risk rating: 1	
Audit risk rating	Rationale for audit risk rating	
Low	Controls are rated as strong as they have improved during the audit period, and all unread ICPs are now reviewed monthly, and contact with the customer or MEP is initiated. The impact on settlement and participants is expected to be minor as good estimation processes are in place. ICP 0001982631TG4C3 is not "active" and no consumption is expected, so there is no impact on submission.	
Actions taken to resolve the issue	Completion date	Remedial action status
<u>CTCS</u> The Simply Energy process for unread meters is a monthly "Unread Meter >3 Months" tracked and sent to Key & Account Leads for follow up contact. Any unread meters continuing to appear across multiple months will be linked with different contact methods up to 3 months and tracked in Salesforce. Account leads and Key account leads will be refreshed on the requirements to contact the customer 3 times using two forms of communication (Phone and Email) as well as targeted training for individuals. ICP 0001982631TG4C3 has been added to the unmetered list of ICPs so will no longer report in the reading reports as missing.	<u>CTCS</u> Ongoing	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<u>CTCS</u> Monthly reports are created by data from Wells for manual meters and non-communicating smart meters from our records on failed reads > 3months and actioned by the Key and Account Leads Team. Additional information is being added to this report to show ongoing non reads so contact will then be made each month up to 3 months in a row. There are further reports in Salesforce that highlight unread meters as second verification. The way the customer is contacted will be linked to each month of non-read to ensure multiple different ways to contact the customer are used. Additionally, spot checking will occur to ensure this work is being completed.	<u>CTCS</u> 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, and monthly reports were provided and reviewed. A sample of 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

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment.

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
May 23	362	36	7,900	96.97%
Jun 23	363	36	7,817	97.00%
Jul 23	362	39	6,936	97.31%
Aug 23	362	32	6,089	97.63%
Sep 23	362	31	5,312	97.93%
Oct 23	364	32	5,217	97.97%

Read attainment percentages are similar to the last audit.

I reviewed 20 ICPs not read in the previous four months determine whether exceptional circumstances exist, and if CTCT had used their best endeavours to obtain readings. The ICPs were not read because of access issues, being unable to locate the premises or meter, MRS applying the forced complete code, the customer refusing access, meter configuration issues preventing smart meter data from being uploaded, or safety issues.

- Exceptional circumstances or best endeavours were proven for 16 ICPs.

- ICPs 0000001100RC02E did not have exceptional circumstances, and best endeavours were not proven.
- ICP 0000000910TC730 was receiving actual AMI readings, but June to October 2023 readings were not loaded into SAP until the meter configuration in SAP was corrected on 4 November 2023.
- CTCT could not confirm which ICPs were unread in the four months ending October 2023 at MXQ0111 and TSS0011. Reporting from SAP confirmed all ICPs connected to these NSPs had actual validated readings in the four months ending October 2023, but the report showed one ICP unread at each of the NSPs.

Description	Recommendation	Audited party comment	Remedial action
CTCT Validate meter reading frequency reports	CTCT Investigate why the meter reading frequency report for October 2023 reported one ICP unread each at MXQ0111 and TSS0011 in the last four months, when all ICPs connected appear to have actual readings.	This is being investigated and will be escalated to the SAP team for a deep dive investigation into the script used to create the report.	Investigating

CTCS

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
May 23	185	41	169	92.31%
Jun 23	182	42	174	92.08%
Jul 23	177	40	156	92.77%
Aug 23	180	52	195	91.18%
Sep 23	172	29	115	94.38
Oct 23	170	34	132	93.21%

I reviewed ten ICPs not read in the previous four months where less than 90% of ICPs on the NSP had been read to determine whether exceptional circumstances exist, and if CTCS had used their best endeavours to obtain readings. Two switched ICPs were included in the report in error at VECT-ROS0221 and POCO-WKO0331.

The other eight ICPs were not read because of access issues, communications faults, or the meter being removed. For six ICPs the best endeavours requirements were met and for the other two ICPs only one attempt to resolve the issue by contacting the customer or arranging a special reading had been made per ICP.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 6.10</p> <p>With: Clause 9(1) and (2) Schedule 15.2</p> <p>From: 30-Jun-23</p> <p>To: 31-Oct-23</p>	<p>CTCT</p> <p>For one ICP unread in the four months ending 31 October 2023, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>The meter reading frequency report indicated that reads had not been received in the four months ending October 2023 for some ICPs at MXQ0111 and TSS0011. Reporting from SAP confirmed all ICPs connected to these NSPs had actual validated readings in the four months ending October 2023.</p> <p>CTCS</p> <p>For two ICPs unread in the four months ending 31 October 2023, exceptional circumstances did not exist, and the best endeavours requirement was not met.</p> <p>ICPs which had switched out prior to the end of October 2023 were included in the October 2023 meter reading frequency report in error.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>Controls are rated as moderate overall:</p> <ul style="list-style-type: none"> for CTCT there are meter read compliance processes in place, but the automated meter read compliance report does not begin until the ICP has been unread for at least 130 days, and for CTCS processes have improved during the audit period, and all unread ICPs are now reviewed monthly, and contact with the customer or MEP is initiated. <p>The impact on settlement and participants is expected to be minor as good estimation processes are in place. The report accuracy issues overstate the number of ICPs unread slightly.</p>		
Actions taken to resolve the issue	Completion date	Remedial action status	
<p><u>CTCT</u></p> <p>BOPE stopped sending through data for the unused export register on ICP 0000000910TC730. Since the ICP was set up to read two registers' worth of reads, it created errors on the singular reads it was receiving. The issue came to Contact's attention through the BPEM process when the issue was identified and a "No MR" flag was put on the register.</p> <p>The Meter Frequency Report pulls actual reads based on a set of parameters. The parameters have missed the actual read recorded in September for ICP 0126136568LCC0C on Grid TSS0011 and the actual reads recorded in September and</p>	<p><u>CTCT</u></p> <p>7/11/2023</p> <p>14/03/2024</p>	<p>Investigating</p>	

<p>October for ICP 0000800100MT414. Conversations have started around the parameters.</p> <p><u>CTCS</u></p> <p>The process is a monthly unread meter >3 months tracked and sent to Key & Account Leads for follow up contact. Any unread meters continuing to appear across multiple months will be linked with different contact methods up to 3 months. Account leads and Key account leads have now been refreshed on the requirements to contact the customer 3 times using two forms of communication (Phone and Email) as well as targeted training for individuals.</p>	<p><u>CTCS</u></p> <p>Ongoing</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>The registers for ICP 0000000910TC730 were brought in line with the data received and actual smart reads populated thereafter.</p> <p>Once we understand the parameters, a ticket will be raised to see if the parameters can be amended going forward to enhance the precision of the Meter Frequency Report.</p> <p><u>CTCS</u></p> <p>Monthly reports are created by data from Wells for manual meters and non-communicating smart meters from our records on failed reads > 3months and actioned by the Key and Account Leads Team. Additional information is being added to this report to show ongoing non reads so contact will then be made each month up to 3 months in a row. There are further reports in Salesforce that highlight unread meters as second verification.</p> <p>The way the customer is contacted will be linked to each month of non read to ensure multiple different ways to contact the customer are used.</p> <p>Simply Energy can also now raise a "Special meter read" to Wells to action outside the normal read cycles. This will speed up the process of being able to send a meter reader back to a site to gain an actual read when additional access information is received from a customer. Additionally, spot checking will occur to ensure this work is being completed.</p>	<p><u>CTCT</u></p> <p>7/11/2023</p> <p>30/04/2024</p> <p><u>CTCS</u></p> <p>Ongoing</p>	

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

HHR data is collected by agents, and generation data is collected by Contact. Data collection processes were reviewed for generation, and as part of the agent audits.

Audit commentary

CTCT

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. The backup meters are connected to the same measuring transformers. There are also backup SCADA installations with separate CTs, VTs and meters.

Of the three ICPs with meter category three or higher, only ICP 1001157629CK617 had HHR data supplied to CTCT by another party, and compliance with this clause has been demonstrated by Blue Current Assets NZ Limited.

HHR AMI data is provided by MEPs.

CTCS

Compliance is recorded in the Blue Current Assets NZ Limited and EDMI agent audit reports.

HHR AMI data is provided by MEPs.

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

HHR data is collected by agents, and generation data is collected by Contact. Data collection processes were reviewed for generation, and as part of the agent audits.

Audit commentary

CTCT

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.

Of the three ICPs with meter category three or higher, only ICP 1001157629CK617 had HHR data supplied to CTCT by another party, and compliance with this clause has been demonstrated by Blue Current Assets NZ Limited.

HHR AMI data is provided by MEPS.

CTCS

Compliance is recorded in the Blue Current Assets NZ Limited and EDMI agent audit reports. HHR AMI data is provided by MEPS.

Audit outcome

Compliant

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

- 11(3)(a) - the date of interrogation,*
- 11(3)(b) - the time of commencement of interrogation,*
- 11(3)(c) - the operator identification (if available),*
- 11(3)(d) - the unique identifier of the meter or data storage device,*
- 11(3)(e) - the clock errors outside the range specified in Table 1 of clause 2,*
- 11(3)(f) - the method of interrogation,*
- 11(3)(g) - the identifier of the reading device used for interrogation (if applicable).*

Audit observation

HHR data is collected by agents, and generation data is collected by Contact. Data collection processes were reviewed for generation, and as part of the agent audits.

Audit commentary

CTCT

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.

Of the three ICPs with meter category three or higher, only ICP 1001157629CK617 had HHR data supplied to CTCT by another party, and compliance with this clause has been demonstrated by Blue Current Assets NZ Limited. HHR AMI data is provided by MEPS.

CTCS

Compliance is recorded in the Blue Current Assets NZ Limited and EDMI agent audit reports. HHR AMI data is provided by MEPS.

Audit outcome

Compliant

7. STORING RAW METER DATA

No activity occurred for CTCX during the audit period.

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

I viewed reading data that had been retained for over 48 months during the audit.

I viewed audit trails in SAP, IMDM, and MV90 and confirmed that read and volume data cannot be modified without an audit trail being created. Access to CTCT's systems is restricted using logins and passwords.

CTCS

CTCS intends to retain raw meter data indefinitely, and I confirmed that the first data supplied for CTCS ICPs was retained.

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. All DUMML ICPs are supplied under the CTCS trader code. CTCT does not supply any DUMML ICPs.

Audit commentary

CTCS deals with some non-metering information for DUMML ICPs. EMS retains the data logger files, and compliance is recorded in their agent audit report.

CTCS will retain DUMML information provided by database owners indefinitely, and data from 2020 was viewed during the audit.

Audit outcome

Compliant

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

No activity occurred for CTCX during the audit period.

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 robot, 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. Two examples were reviewed and confirmed that the correction has correctly applied through to submission data.

CTCS

Where errors are detected during validation of NHH 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 and, forward estimates are created.

If a reading is invalidated before being sent to MADRAS, it will not be sent. Validated (published) reads are exported to MADRAS for NHH settled ICPs through the "PushActual" process. The "PushActual" process ensures that all readings which have been entered, modified, removed, or invalidated since the process was last run are sent to MADRAS.

If transposed meters are identified through the validation process, they are 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 and generation meter data were reviewed, and a sample of corrections were checked.

Audit commentary

CTCT

HHR meter data

No corrections were conducted for meters with category three or higher.

AMI HHR data errors are identified through the data validation process, missing reads process, or information provided by the customer or MEP. Where errors are detected replacement data is estimated by IMDM in accordance with the code. The estimation process is discussed in **section 9.4**.

Section 9.6 in the previous audit report explained that ICP 0110003151EL984 reported an EFA - VT FAILURE (commonly known as a phase failure) event on 12 January 2022, and a service order was completed on 3 May 2023, but no correction was processed. CTCT has since confirmed that repeated phase failures are being caused by blown fuses, and that no consumption has occurred during the periods with phase failure and no volume correction is required. It is believed the issues may be caused by water entering the meter box during severe weather events, and if the issue recurs CTCT will request that the meter box and meters are replaced.

I checked ten examples of corrections for ICPs settled as HHR and confirmed that they were reasonable and based on the best information available.

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.

There were two corrections performed during the audit period relating to meter recalibration where the meters have been placed into test mode by the authorised test house. In both cases the authorised test house provided data from a reference meter for use during the affected period. This data was applied to MV90 as a correction and an appropriate error correction journal and audit trail was applied. The data was then graphed to ensure that the affected period is consistent with actual data either side of the corrected period.

CTCS

EDMI and Blue Current Assets NZ Limited supply HHR data directly to CTCS. CTCS 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.

I reviewed 11 HHR corrections made by CTCS relating to meter changes and faults. All were correctly calculated and processed and had compliant audit trails.

Blue Current Assets NZ Limited provided five examples of ICPs where they had advised CTCS that HHR corrections were required:

- two had corrections calculated and processed and had compliant audit trails,
- ICPs 0311820220LC311 6 June 2023 and 0108507076LC655 3 June 2023 had a data gap and then spike where data was pushed into the next interval creating a “double interval”; the data for the “double interval” should have been spread between the double and missing intervals, but CTCS instead estimated consumption for the missing interval based on a similar trading period, and
- ICP 0007680824HBFD9 had fuses blown off during a cyclone and interval data needed to be estimated from 14 February 2023 until 1 March 2023; a correction was manually calculated but was based on the same calendar day of the previous year, rather than the same day of the week.

CTCS intends to process corrections for these ICPs, and revised submission data will be washed up.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 8.2 With: Clause 19(2) Schedule 15.2 From: 14-Feb-23 To: 06-Jun-23	CTCS Two corrections for double intervals and one correction for a meter fault were not handled correctly. 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 because there is a compliant correction process, but in some instances, it was not correctly followed.

	The impact is low, CTCS intends to process corrections for these ICPs, and revised submission data will be washed up.	
Actions taken to resolve the issue	Completion date	Remedial action status
<u>CTCS</u> Data corrections have been processed through Simply Energy systems and the wash ups will occur as they fall due.	<u>CTCS</u> 15 Mar 2024	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<u>CTCS</u> Simply Energy have identified more resource is needed in this space and as a result, are proactively training another member of the team to assist in this space which will ensure better data quality - Operations Team Lead is also acting as Quality Control.	<u>CTCS</u> Aug 2024	
Simply Energy are also working with their internal system administrator to improve current process in Salesforce to assist with timing and actions and to provide the Operations Team Leader visibility to assist and/or add resource where required.	Dec 2024	

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

CTCT

CTCT is responsible for Te Huka 0000018218HRB13 where the capacity exceeds 10MW, and the distributor has published an individual loss factor. The generation loss factor is recorded in SAP as part of a profile formula and applied to the generation data as part of the pricing manager file creation process within SAP. I confirmed that the loss factor for Te Huka was correctly assigned in SAP.

CTCS

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

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

No activity occurred for CTCX during the audit period.

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 **section 4** and corrections were reviewed in **sections 2.1** and **8**.

Audit commentary

CTCT

All readings checked during the audit were correctly classified apart from:

ICP	Event audit no	Event date	Update date	Issue	Section
0000031936WED55	CS-4733276	5 April 2023	5 April 2023	The read type in the CS file was E but should have been A	4.3
0002710536EN54D	CS-4805226	30 May 2023	2 June 2023	The read type in the CS file was A but should have been E	4.10
0000818179HB871	RR-202577	25 August 2023	18 September 2023	The read type in SAP was recorded as E but should have been A	4.4
0000189070UNC52	RR-203203	21 July 2023	3 October 2023	The read type in SAP was recorded as E but should have been A	4.11
0000515163DE4CF	RR-204624	25 July 2023	8 November 2023		
0253915910LC8C9	RR-204755	31 August 2023	13 November 2023		

RR readings are entered into SAP manually, and there is a known issue where the read type sometimes reverts to a different value before the user saves the update. The inaccurate CS read types occurred due to meter modifications because there were multiple reads for the same day.

IntelliHUB estimates are not used by CTCT.

CTCS

All switch event readings must be recorded with a read type of actual to ensure that they are sent to MADRAS to calculate historic estimate, but the description in DataHub indicates the read type.

All readings checked during the audit were correctly classified apart from:

ICP	Event audit no	Event date	Update date	Issue	Section
0000003020KPDE7	CS-5160793	18 October 2023	18 October 2023	The read type in the CS file was A should have been E	4.3
0000161818CK5BB	CS-4844643	1 July 2023	3 July 2023	The read type in the CS file was A should have been E	4.10
0015726023ELOFC	CS-5252534	1 October 2023	30 October 2023		
0015726036EL71E	CS-5252537	1 October 2023	30 October 2023		

Estimates provided by MEPs are recorded against a non-billable (ANH) data steam and are not validated or used for submission. I checked an example of an estimate provided by IntelliHUB which confirmed this.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 9.1</p> <p>With: Clause 3(3) Schedule 15.2</p> <p>From: 05-Apr-23</p> <p>To: 13-Nov-23</p>	<p>CTCT</p> <p>Two CS files had an incorrect read type recorded.</p> <p>Four ICPs which had undergone read changes had an estimated read type recorded in SAP but should have had an actual read type.</p> <p>CTCS</p> <p>Four CS files had an incorrect read type recorded.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are recorded as strong because read types are normally recorded correctly.</p> <p>The impact on settlement and participants is low, because the read values were correct, and all switch event reads are treated as validated and permanent by the reconciliation process. Invalidly applying the read type "A" for a transfer switch can impact on the gaining trader's ability to issue read renegotiation requests under clause 6(2) and (3) Schedule 11.3.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Two CS files had an incorrect read type recorded.</p>		<p><u>CTCT</u></p> <p>August 2024</p>	Investigating

<p>We have raised a ticket with our ICT team to investigate the root cause and develop a solution for this issue.</p> <p>Four ICPs which had undergone read changes had an estimated read type recorded in SAP but should have had an actual read type.</p> <p>We have provided refresher training to our agents to ensure correct read type is recorded when corrections are made after the RR process.</p> <p><u>CTCS</u></p> <p>These historic issues cannot be corrected.</p>	<p><u>CTCS</u></p> <p>N/A</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Contact has raised a ticket with our ICT team to find a solution for the issue and further training has been provided to the agents to ensure correct read type is selected for read corrections.</p> <p><u>CTCS</u></p> <p>A QA process was implemented on 01/11/2022, where a backup person checks that the CS data is correct then gives the final approval, however it was discovered in the recent audit in Feb of 2024, that stronger controls were required. We have immediately implemented a new change where we now have extra staff on to assist with the QA process. The CS Automation which is Phase 2 of the Switching Automation is currently scheduled for Quarter 4 of 2024.</p>	<p><u>CTCT</u></p> <p>August 2024</p> <p><u>CTCS</u></p> <p>Dec 2024</p>	

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, and generation data is collected by Contact.

Audit commentary

The MEPs and agents retain the raw, unrounded data. Compliance with this clause has been demonstrated by Contact's MEPs and agents as part of their own audits.

CTCT

NHH reads and HHR interval data is not rounded or truncated on import into IMDM. IMDM transfers NHH meter reads and HHR interval data to SAP with the same precision as it received the data from the AMI MEPs. When reads are transferred from the SAP midnight reads table into the SAP meter read table for use by the billing and reconciliation processes, they are rounded to zero decimal places.

CTCT supplies three ICPs with metering category three or higher:

- ICPs 0000018218HRB13 and 0000032431HR99C are geothermal generation ICPs with category five meters, which are read by CTCT using MV90 and not rounded on import, and
- ICP 1001157629CK617 has readings provided by Blue Current Assets NZ Limited, and compliance is recorded in their agent audit report.

For generation data I traced a sample of reads from MV90 to Oracle, SAP and submission data and confirmed that generation meter data is not rounded or truncated on import.

CTCS

AMI and 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. Blue Current Assets NZ Limited, EMS and EDMI provide data to CTCS in the EIEP3 format with a precision of three decimal places.

NHH readings are imported into DataHub with decimal places included, and MADRAS accepts readings with decimal places.

Manually entered readings including those received from customers can be entered with decimal places.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 9.3 With: Clause 3(5) of schedule 15.2 From: 01-Jun-22 To: 28-Feb-24	CTCT Raw meter data is truncated upon upload into SAP meter read table and not when volume information is created. 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	The controls are considered weak, because all NHH meter information is rounded before it is entered into SAP meter readings table where reconciliation submissions are calculated from. The audit risk rating is low, because only NHH meter readings provided with decimal places are affected		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>CTCT</u> We are investigating the truncated NHH meter readings. Our SAP technical team has completed the preliminary analysis and shared their insights. We are in the process of reviewing the insights and exploring the next steps.		<u>CTCT</u> Ongoing	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Please refer to the actions taken to resolve section.		Ongoing	

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

If a reconciliation participant is unable to interrogate an electronically interrogated metering installation before the deadline for providing submission information, the submission to the reconciliation manager

must be the reconciliation participant's best estimate of the quantity of electricity that was purchased or sold in each trading period during any applicable consumption period for that metering installation.

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

Audit observation

The HHR estimate processes were examined, and a sample of estimates 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

No estimates were created for meters with category three or higher.

AMI estimates for missing data are created in IMDM using a gap filling process to fill missing intervals. The estimates require boundary readings (which may be actual or estimated) and a historic consumption pattern for the ICP/meter/channel in order to calculate the consumption into intervals.

If no estimated or actual data is provided to SAP by IMDM, SAP will estimate based on the following hierarchy unless a meter register and profile are not set up in SAP. If no meter register or profile are set up in SAP, no estimation will occur.

- same day (and day type) from the previous week,
- same day (and day type) from five weeks ago,
- same day (and day type) last year, or
- 0.5 kWh per trading period per meter register.

Estimates are replaced by actual data if it becomes available later. Where a part day of actual data is provided later and some estimated intervals remain, the ICP will fail the sum check validation and the interval data will be re-estimated. There is a new IMDM process which allows previous estimates within a date range to be removed, so that the gap can be refilled with new estimates based on the data available.

There is sometimes a delay in setting up meter registers in SAP for new connections, switch ins, and meter replacements. A SM02 BPEM is created when HHR interval data is received for a meter register which is not set up in SAP, and staff check ORB and/or the registry for metering information and update SAP so that the data can be imported from SAP's staging table. Where no estimated or actual data is received, this BPEM will not be created, and missing data may not be detected unless it is discovered and addressed through the reconciliation submission validation process.

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

A MF09 BPEM is generated in SAP if reads have not been received for 14 days in a row for an AMI meter, and the ICPs are expected to be moved to a NHH manual meter reading round. If the ICP also has a HHR billing product, the MEP will be advised and asked for a timeline to resolve the issue. Where the ICP is HHR settled, an update to the submission type or profile code is not always completed when changing the meter reading source.

Where an HHR settled ICP requires an extended estimation while a communication fault is being investigated the accuracy of the ongoing estimations reduces as SAP runs out of viable historic

consumption patterns and then moves to the default 0.5 kWh per trading period method. When this scenario occurs, the reasonable endeavours no longer applies in terms of estimation accuracy as the estimated interval consumption is not aligned with received manual meter reads.

IHUB and Blue Current Assets NZ Limited also provide “no comms” reports weekly, listing ICPs which are not communicating. Bulk field services jobs are raised as workloads allow, and CTCT would eventually like to raise 100 jobs per week for non-communicating meters. These MEP reports are also used as a reference when investigating non-communicating meters.

An assessment of the count of AMI HHR intervals estimated by IMDM for use in the CTCT HHR submission for the November 2023 submission was performed. CTCT performed estimations for 2.378 million intervals out of a total number of intervals submitted of 310.726 million intervals (0.7% of all intervals estimated). SAP also performs HHR estimations where AMI meters have stopped communicating and the ICPs are still recorded with HHR submission type. I checked the registry list for ICPs without a HHR meter or communicating AMI meter where HHR submission was applied. ICP 0241451000LCF23 was settled as HHR without the HHR or AMI flag set to yes because the issues preventing the meter from communicating were resolved.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCT</p> <p>Clarify responsibilities and timeframes for investigating non-communicating AMI meters, moving them to NHH reading rounds, and updating the submission type and profile</p>	<p>CTCT</p> <p>Ensure that there are clear responsibilities and expectations for identifying non-communicating AMI meters, following them up with the MEP, and moving them to a NHH reading route and submission type if the issue cannot be resolved promptly.</p>	<p>We are working through a more structured process of bulk raising jobs with MEPs. This should see more non-comms issues being resolved faster where possible.</p> <p>We are exploring automating the moving of ICPs to a manual meter reading round (if unable to resolve the non-comms issue) to ensure timeliness going forward.</p> <p>New Exception Type to be added in Exception Management Tool to report on AMI Non-Communicating ICP's (AMI Y= N) and HHR profile/submission type.</p> <p>Our Energy Reconciliation team will complete a reconciliation of existing AMI Non-Communicating ICP's and move all ICP's from HHR to NHH Submission type which have been non communication greater than 2 months. Implement process to manage this going forward.</p>	<p>Investigating</p>

I reviewed the process for estimating any missing intervals that have occurred during meter changes. IMDM reflects all meter installations as occurring at the beginning of a day (0000 hours) and meter removals as occurring at the end of a day using the last received midnight read as the removal read. An estimation algorithm is used to estimate and profile any missing data during the meter change.

I reviewed a sample of ten AMI estimates for missing data and found that the reasonable endeavours requirement was met.

Generation data

If meter readings are not obtained by MV90 an error message will display in MV90 and re-interrogation will be attempted. If data still cannot be obtained and there are missing intervals in SAP an estimate will be created based on the back up metering data. Back-up meters are installed at every generation installation and are connected to the same measuring transformers. There are also backup SCADA installations with separate CTs, VTs and meters. The generation team provides support and information if any estimates are required.

The reconciliation team check the profile data for each generation meter to identify any missing or estimated data. No generation estimates occurred during the audit period.

CTCS

EDMI and Blue Current Assets NZ Limited supply HHR data directly to CTCS. CTCS creates HHR submissions, including temporary estimates, permanent estimates, and corrections.

DataHub creates estimates for missing intervals for HHR AMI meters which have midnight readings every 20 minutes. The estimates are based on the difference between the midnight readings on either side of the data gap less the intervals actual data is received for; and is spread between the intervals based on the reconciliation manager's GR020 profile shape. If the missing data is open ended, meaning there are not sufficient midnight reads to determine the missing consumption then DataHub will apply a daily default value for the affected period.

If there are no readings available for an HHR settled ICP, on business day two a job is run to create temporary estimates based on historic information for an equivalent day and trading period of the last week with actual volume data, 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 for days that are estimated.

Where insufficient metering history is available for DataHub to calculate estimates or an ICP has metering category three or higher, estimates are manually calculated and then imported into DataHub in EIEP3 format. The missing reads will be identified through the CTCS ICP days validation, because no ICP days will be reported because no volumes are calculated. Estimates are created manually using a similar period from the ICP's consumption history, or data collected when responding to a request for proposal prior to switch in. In some cases, estimates are not created where CTCS believes the difference is immaterial, such as ICP 0000545367NR00D found in the previous audit, and ICP 0000545550NRC39 found during this audit.

ICP 0000545550NRC39 switched in on 1 November 2023, with a HHR TRUM meter. No meter readings were received so CTCS attempted to obtain readings from the previous trader (who confirmed they had not received any readings) the MEP and EDMI. Meter readings were eventually provided by AMCI from 1 January 2024. No estimated data was provided in the November 2023 initial or revision 1 submission. This ICP also had HHR submission without a HHR meter or communicating AMI meter due to confusion because an incorrect meter number was recorded on the registry, and AMCI was the data provider when EDMI was expected.

CTCS also runs a report monthly looking for outstanding estimated data for the previous 14 months in order to follow up with the respective data collector.

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. Temporary estimates are marked as E (estimated) at trading period level. All estimations are peer reviewed and in the permanent estimation the user performing the estimation and the peer reviewer are identified.

As recorded in previous audits, where DataHub receives a part of a day's data in one file, and the remainder of the day's data in another file, data from the earlier file is removed and estimated when the second file for the day is imported. This is primarily an issue for FCLM meters, and FCLM have confirmed that they will not change their process to provide a full day of data in the replacement file for the file format used by CTCS. A DataHub fix is being investigated to either allow import of the new part day data without removing the earlier interval data or moving to a different file format.

Estimates provided by MEPs are recorded against a non-billable (ANH) data steam and are not validated or used for submission. I checked an example of an estimate provided by IntelliHUB which confirmed this.

An assessment of the count of AMI HHR intervals estimated for use in the CTCS HHR submission for the November 2023 submission was performed. CTCS performed estimations for 27,536 intervals out of a total number of intervals submitted of 4,655,616 intervals (0.59% of all intervals estimated). CTCS has asked AXOS to move this report into DataHub production to enable them to identify excessive estimates so that they can follow up missing data.

I reviewed 11 examples of HHR estimates and confirmed that the reasonable endeavours requirements were met.

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 9.4</p> <p>With: Clause 15 Schedule 15.2</p> <p>From: 01-Nov-23</p> <p>To: 31-Dec-23</p>	<p>CTCS</p> <p>ICP 0000545550NRC39 switched in on 1 November 2023, with a HHR TRUM meter. No meter readings were received so CTCS attempted to obtain readings from the previous trader (who confirmed they had not received any readings), the MEP, and EDMI. Meter readings were eventually provided by AMCI from 1 January 2024. No estimated data was provided in the November 2023 initial or revision 1 submission.</p> <p>Potential impact: Medium</p> <p>Actual impact: Low</p> <p>Audit history: Once</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>
Audit risk rating	Rationale for audit risk rating
<p>Low</p>	<p>The controls are moderate. CTCS does not consistently create estimates for HHR ICPs where there is insufficient history or no midnight readings if they consider the difference to be immaterial.</p> <p>The impact is assessed to be low because any ICPs with material differences are expected to have estimates created, and most ICPs have midnight readings available.</p>

Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCS</u></p> <p>The Simply Energy Operations Team worked with both the MEP and previous trader when ICP 0000545550NRC39 switched in but were not able to confirm till a later date whether the metering details uploaded to the Registry were accurate. This was why no estimation was provided in the initial Reconciliation. This issue was not resolved until Revision 3. Simply's normal process when there is missing TOU data at first submission is to estimate based on RFP information however the team were not confident loading estimated data into the metering configuration as received from the Registry given there was concern that this was inaccurate.</p>	<p><u>CTCS</u></p> <p>N/A</p>	<p>Identified</p>
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCS</u></p> <p>Simply believes this issue was a one-off as normal process would have provided an estimate for the interim reconciliation on all TOU ICPs.</p>	<p><u>CTCS</u></p> <p>N/A</p>	

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 their 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 CTCT. 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.

CTCT's file import process identifies any file errors or corruption and creates an exception for ICT to investigate. The CTCT billing team receive email notifications where the code for read type provided by the meter reader is inconsistent with the expected code based on the meter read order, such as a special reading when there is no special meter read order, and where the meter digits or the ICP-meter-register combination does not match SAP.

Once successfully imported, billing validations identify any consumption outside prescribed limits and create exceptions for:

- implausible reads,
- negative consumption,
- zero consumption,
- vacant consumption over 0 kWh and inactive consumption over 2 kWh, and
- billed dollar values outside the expected values.

The exceptions are assigned to users or robots as BPEMs. Robots 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 robot will issue a request for a control (out of cycle) meter reading. Any returned special readings are reviewed by a billing team member and the robot will attach photo reads from the MRS portal to the BPEM for review.

Exceptions not validated by the robots 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 several primary users, to ensure that several team members are familiar with the process to cover absences. The Operations Team Leader monitors overdue service orders, BPEMs and the total number of service orders and requests twice daily; and takes action to follow up and redistribute tasks if required. Often the billing team cannot resolve an exception until other operations teams have made changes to the ICP and customer account data, including where a meter change is needed, pricing is missing, or read renegotiation is underway. Summary reporting of open service orders, performance and workloads is reviewed weekly. Similar monitoring is in place for field services BPEMs.

Billed dollar value outside of tolerance validation thresholds are not reviewed as part of any price change and have not been amended for a number of years. Where an ICP triggers this threshold repeatedly and

is confirmed as being valid, it is moved into the next price band. Price changes are unlikely to trigger changes of price band.

Disconnected ICPs with consumption

The inactive consumption validation process is discussed in detail in **section 3.9**. Inactive ICPs continue to be read, and BPEMs are used to identify inactive consumption. CTCT has found that not all inactive consumption exceptions are identified by the BPEMs, and the number of current exceptions has increased over this audit period from 377 ICPs to 636 ICPs and 127,192 kWh of inactive consumption to 549,610 kWh. ICT tickets have been raised to identify the reasons for differences between ICPs with inactive consumption identified through reporting and the BPEMs to determine whether the BPEM criteria needs to be revised, and to investigate the settlement unit errors.

Pre pay meters

CTCT has phased out its legacy pre-pay meters. There are currently two “active vacant” ICPs with the prepay flag set to yes which have been moved to post pay mode. The meters will be replaced once the ICPs are occupied.

CTCS

Meter reader validation

For meters manually interrogated by Wells, 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 their agent audit report.

As discussed in **section 6.6**, Wells validates readings and check meter condition when readings are obtained, but this information is not consistently reviewed.

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 **sections 6.5** and **9.6**.

Read import and billing validation

The NHH validation process includes the following 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 is consistent with the number of digits recorded,
- whether the reading is lower than previous reads, which identifies negative consumption,
- whether the meter has rolled over, and
- consumption between reads against the estimated forward daily kWh between the previous set of reads to identify high, low (10 kWh less than the average daily consumption) or negative 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.

A volume check is completed prior to each day’s billing run for end of month billing. The report compares volumes for the past four months at ICP level and is used to identify the following exceptions:

- ICPs with consumption differences over $\pm 20\%$ from previous months,
- ICPs with zero usage,

- new ICPs with only a switch in read, which are checked to confirm that their estimated consumption is reasonable based on information obtained on switch in, and
- ICPs which have the default estimate values applied.

ICPs with missing boundary readings such as installation or removal reads are identified as part of the Salesforce dashboard checks.

ICPs with persistent (more than three months) of zero consumption are checked to determine the ICP type, and followed up with the customer if they are not expected to have zero load during that period. CTCS supplies some irrigation ICPs which are expected to have periods with zero loads.

Consumption on inactive ICPs

Data streams remain open for inactive ICPs in DataHub and reads will be imported and validated. CTCS reports on inactive ICPs with consumption and investigates any ICPs with inactive consumption of 1 kWh or more. Two ICPs with inactive consumption were identified, both had 1 kWh or less of consumption which appears to be due to meter creep or how the meter is read when it is between units.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

17(4)(f) - a review of the meter and data storage device event log for any event that could have affected the integrity of metering data must be investigated,

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

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

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

Audit observation

I reviewed 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, Blue Current Assets NZ Limited, 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

AMI read validation

Information is viewed, validated, and managed using the Smart Reads Console interface to 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 seven business days for most ICPs and two to four days for prepay ICPs 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).
- Meters with negative consumption are put “on hold” in IMDM. Where the consumption is at least -1000 kWh it is treated as a meter rollover and automatically corrected. Differences between -1 and -999 kWh are individually checked and corrected as necessary by replacing invalid or high estimated reading where required.
- Check-sum validation identifies ICPs where the sum of the volumes for the trading periods between midnight readings is not within ± 2 kWh of the difference between midnight readings, or midnight readings are missing. These exceptions are individually reviewed and corrected by processing an adjustment in IMDM so that the interval data is consistent with the volume calculated between the two midnight reads. In most cases the sum-check exception is due to the meter reads used for the sum-check validation not being at midnight and the actual interval data being replaced by estimates was accurate and correct. IMDM requires actual or estimated boundary readings to be entered so that estimates can be generated to align with the consumption calculated between these reads.

The previous audit had recorded non-compliance where the data is not fully investigated to determine whether the midnight reads, or interval data, is correct before making the correction. I agree that investigation should occur for large differences, but believe it is impractical to verify whether the reads or interval data is incorrect for every sum-check difference.

- When data for a new meter at an ICP is provided, IMDM will automatically create the meter and register against the ICP with an effective start date of the first day data is provided for. If it replaces another meter, the ICP will be identified through the missing data validation and the user will manually end date the removed registers, confirm the correct start date for the new registers and check the readings provided against ORB field services paperwork. SAP will not accept data outside the meter install and removal dates, so date exceptions are sometimes identified in SAP and referred back to the IMDM team.

Validated AMI interval and unvalidated meter register read data is transferred from IMDM to SAP, and the reads also undergo the SAP NHH read validations described in **section 9.5**.

AMI meter event validation

MEPs monitor meter events which could affect accuracy and clock synchronisation, and this is covered as part of their audits. Each of the MEPs advise CTCT of clock synchronisation and meter events either via individual emails or the provision of full meter event log or time difference reports.

Events emailed directly to Contact by the MEP and events sent by IntelliHUB via SFTP which are redirected to email are consistently reviewed and actioned if the covering email from the MEP indicates that an action is required. I reviewed examples of these meter events and clock synchronisation events, and confirmed action was consistently taken.

Full lists of meter events and attachments to emails where the MEP has indicated no action is required are not reviewed by Contact. I reviewed a sample of events from event reports which CTCT provided and confirmed that no action was taken.

It is important to review meter events to identify issues that could affect meter data accuracy including tampering, and reverse rotation which could indicate distributed generation. Over time CTCT has attempted to develop processes to review all meter events but has found it difficult with different MEPs using different reporting formats, event codes and types. CTCT now intends to ask the MEPs to analyse the events on their behalf and provide lists of ICPs where action is required.

Clock synchronisation events can result in volumes being recorded against the incorrect date and/or trading period. When the clock is synchronised, any volumes after the last trading period recorded will be pushed into the trading period where synchronisation occurred. For example, if the meter shows 1.15pm when it is synchronised to the correct time of 1.50pm (a 35 minute or 2100 second difference), the meter will record consumption in the interval 12.30-12.59.59pm before the synchronisation, and the next interval after synchronisation will be 1.30pm-1.59.59pm which will contain all the consumption for the two intervals since 1.00pm. Contact's HHR estimation process will automatically create an estimate for the missing trading period, but it will be zero rather than splitting the volume, because the sum of the trading periods will match the difference between the midnight readings.

Contact does not currently have a process to identify HHR settled ICPs where clock synchronisation errors are more than ± 1800 seconds (one trading period) or NHH settled ICPs where clock synchronisation errors are more than $\pm 86,400$ seconds (one day), so that volumes can be reported against the correct trading period and day.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCT</p> <p>Clock synchronisation events</p>	<p>CTCT</p> <p>Develop a process to identify HHR settled ICPs where clock synchronisation errors are more than ± 1800 seconds (one trading period) or NHH settled ICPs where clock synchronisation errors are more than $\pm 86,400$ seconds (one day).</p> <p>Develop a process to correct consumption data when HHR settled ICPs have their clocks adjusted by more than ± 1800 seconds (one trading period).</p>	<p>MEPs send time sync reports to the Field Connections Meter Reading inbox.</p> <p>We will explore creating a process to look at both HHR and NHH settled ICPs where clock adjusted by ± 1800 second and $\pm 86,400$ seconds respectively.</p>	<p>Investigating</p>

Recommendation	Description	Audited party comment	Remedial action
	Develop a process to correct consumption data when NHH settled ICPs have their clocks adjusted by more than $\pm 86,400$ seconds (one day).		
CTCT Meter events	<p>CTCT</p> <p>Develop a process to identify any event that could have affected the integrity of metering data in the event log and investigate and resolve those events.</p> <p>This could be achieved by Contact directly reviewing the meter events or making arrangements for the MEP to do this on their behalf if agreement can be reached.</p>	We are working with our MEPs to reach an agreement to only deliver the metering events where metering data integrity is impacted.	Investigating

The previous audit recommended that CTCT develop a process to peer review all service orders relating to meter faults to ensure that where a data or volume correction is also required, that this is undertaken consistently. CTCT has a process to search ORB jobs for key words to identify jobs that may require corrections to be processed.

HHR

CTCT supplies three ICPs with metering category three or higher:

- ICPs 0000018218HRB13 and 0000032431HR99C are geothermal generation ICPs with category five meters, which are read by CTCT using MV90, and
- ICP 1001157629CK617 has readings provided by Blue Current Assets NZ Limited, and compliance is recorded in their agent audit report.

No clock synchronisation issues were identified during the audit period.

Generation

Contact collects generation data via the services access interface. Back-up meters are installed at every generation installation and are connected to the same measuring transformers. There are also backup SCADA installations with separate CTs, VTs and meters.

The installed data loggers have a data storage capacity of at least 30 days, and MV90 attempts to retrieve data hourly from each meter. If data cannot be retrieved by the system, a user will investigate and then reattempt to retrieve the data.

Each morning, MV90 is checked to ensure that meter data has been collected including meter event log information, and that the data has been validated. The validation meets the requirements of the code and identifies:

- missing data,
- zero values,

- a comparison of consumption against the meter's history including comparing peak values, interval values,
- clock synchronisation events, and
- meter events which could affect accuracy.

Contact conducts a comparison between the primary data in MV90, the data in MDM, the AV130 file and SAP.

CTCS

AMI read validation

For HHR AMI ICPs CTCS carries out the same billing validation as used for NHH ICPs, which includes high and low consumption to achieve compliance with 17(4)(d). Files with incorrect dates or times will be identified at the time of loading and two identical files cannot be loaded.

When AMI data is imported a sum check is completed, and the data will fail validation if there are differences, missing readings or missing trading period data. A report is run at the end of the month once all replacement data is imported to investigate any sum check failures and if necessary, estimate the midnight reading or missing intervals so that the data can pass validation.

AMI meter event validation

AMI Meter event log information is received via SFTP and loaded into the datawarehouse daily, and reports of meter events are generated weekly. CTCS has liaised with the MEPs and developed a Confluence process for reviewing the meter events and determining which actions are required.

The new processes are still being bedded in, reporting has been developed for Blue Current Assets NZ Limited, is under development for FCLM, and SMCO files were not being imported into the datawarehouse prior to the audit. IHUB confirmed that they review all events for meters they are responsible for and provide any events requiring action to CTCS.

I checked recent examples of meter events and found that for SMCO and FCLM no action had been taken because the reporting processes are still being developed. Some events had been investigated and actioned for Blue Current Assets NZ Limited, but no action had been taken on suspected tamperers for ICPs 0000505433NRD98, 0000015252EAB8A and 0000056727TRD17 for November 2023.

Any meter events requiring action emailed to CTCS by MEPs are reviewed and actioned.

HHR

EDMI and Blue Current Assets NZ Limited supply HHR data directly to CTCS, and CTCS validates the data and creates HHR submissions. Validation includes:

- reporting to identify missing trading period data, which is followed up with Blue Current Assets NZ Limited and EDM; missing data which is unable to be obtained is usually estimated, and then replaced with actual data if it becomes available at a later date - non-compliance is recorded in **section 9.4** because HHR estimates are not always created if there is insufficient history in DataHub,
- a sum-check, and
- a comparison of ICP-flow direction submission data to the previous submission(s) for the month for revisions, and previous month for initial submissions; any combinations with differences of more than $\pm 20\%$ and 30,000 kWh or any over 50,000 kWh are checked unless the ANZSIC code indicates that they are an irrigation ICP.

Blue Current Assets NZ Limited and EDM provide any meter events requiring action to CTCS, and I saw evidence that these are reviewed and actioned appropriately.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 9.6</p> <p>With: Clause 17(4)(f)&(g) of schedule 15.2</p> <p>From: 01-Apr-23</p> <p>To: 28-Feb-24</p>	<p>CTCT</p> <p>Full AMI meter event logs provided by MEPs are not routinely reviewed.</p> <p>CTCS</p> <p>Full AMI meter event logs provided by MEPs have not consistently been reviewed and actioned, but improved processes are being implemented and data from Blue Current Assets NZ Limited is now consistently reviewed.</p> <p>Potential impact: Medium</p> <p>Actual impact: Medium</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	
<p>Low</p>	<p>The controls are recorded as weak overall:</p> <ul style="list-style-type: none"> For CTCT meter event information is only dealt with if the MEP sends additional correspondence and not all provided notifications of meter events requiring action. For CTCS meter event information for some MEPs is reviewed and processes are being developed for the other MEPs. <p>The impact of the lack of event log monitoring is low because any events requiring action identified by the MEPs and sent to Contact are reviewed and actioned,</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Contact is exploring changes with our MEPs to reach an agreement to ensure they are only delivering events that could have affected the integrity of the metering data, as well as ensuring a resolution is realized.</p> <p>We are already processing the metering events where MEPs are sending the individual ICPs through emails.</p> <p><u>CTCS</u></p> <p>AMI Events for all MEPs who provide these are now monitored weekly, any investigations are also done with MEP's or with end customers if appropriate.</p>	<p><u>CTCT</u></p> <p>August 2024</p> <p><u>CTCS</u></p> <p>Feb 2024</p>	<p>Investigating</p>

Preventative actions taken to ensure no further issues will occur	Completion date	
<p><u>CTCI</u></p> <p>Contact is working with our MEPs to filter and deliver the events where metering data integrity is impacted, as well as ensuring a resolution is realized.</p>	<p><u>CTCI</u></p> <p>August 2024</p>	
<p><u>CTCS</u></p> <p>The Compliance Team will continue to monitor Event Logs on a weekly basis with the aim of automation and movement to a BAU Team in future.</p>	<p><u>CTCS</u></p> <p>Dec 2024</p>	

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 and 13.137A

Code related audit information

Using an approved system or by written notice, each generator must give the relevant grid owner half-hour metering information for—

(a) unoffered generation from a generating station with a point of connection to the grid,

(c) electricity supplied from a type B industrial co-generating station with a point of connection to the grid.

If the half-hour metering information is not available, the generator must give the relevant grid owner a reasonable estimate of such data using an approved system or by written notice.

Using an approved system or by written notice, each intermittent generator must, in relation to an intermittent generating station with a point of connection to the grid, give the relevant grid owner half-hour metering information for the intermittent generating station.

This clause does not apply to unoffered generation. If the half-hour metering information is not available, the generator must give the relevant grid owner a reasonable estimate of such data using an approved system or by written notice.

Using an approved system or by written notice, each intermittent generator must, in relation to an intermittent generating station with a point of connection to the grid, give the relevant grid owner half-

hour metering information for the intermittent generating station. This clause does not apply to unoffered generation. If the half-hour metering information is not available, the intermittent generator must give the relevant grid owner a reasonable estimate of such data.

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

Each generator must provide the information required by clauses 13.136, 13.137, and 13.137A—

(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; and

(b) in the manner and form that the relevant grid owner stipulates; and

(c) by 1000 hours on a trading day for each trading period of the previous trading day.

To avoid doubt, each generator must provide the half-hour metering information required under this clause—

(a) in accordance with the requirements of Part 15 for the collection of that generator's volume information; or

(b) from a source and in a manner agreed between the generator and the grid owner.

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.

For this process, EMS collects the data as an agent for generators. Interrogation begins at midnight and is complete before 0500 on each day. 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.

Contact is responsible for Te Huka 0000018218HRB13 where the capacity exceeds 10MW, and the distributor has published an individual loss factor. The generation loss factor is recorded in SAP as part of a profile formula and applied to the generation data as part of the pricing manager file creation process within SAP. I confirmed that the loss factor for Te Huka was correctly assigned in SAP.

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

No activity occurred for CTCX during the audit period.

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, and I checked whether any breach allegations had been made.

Audit commentary

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 for CTCT or CTCS.

CTCT

If a new combination of network and NSP requires set up in SAP, the reconciliation team is notified by the network, the switching team, or the new connections team, and a trading notification is created as part of the set-up process. Submission data is checked against open trading notifications as part of the pre-submission validation checks.

CTCS

New ICPs use RPS, PV1 or HHR profile and trading notifications are not required. DUML ICPs use the DST profile, and a trading notification will be raised as part of the switching process if new DUML ICPs switch in.

Audit outcome

Compliant

11.2. Calculation of ICP days (Clause 15.6)

Code reference

Clause 15.6

Code related audit information

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

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

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

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

Audit observation

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

Alleged breaches were reviewed to determine whether any submissions were made late.

Audit commentary

There were no alleged breaches for late provision of ICP days information.

CTCT

HHR and NHH ICPs are recorded on a single report. SAP's settlement units 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. CTCT has found some intermittent issues with the creation of settlement units, including the auto triggers not working correctly for some disconnections and reconnections, and the grid settlement unit flag preventing some disconnection settlement unit updates. Submission is correct once the settlement units have been updated, and the reconciliation team's validation processes help to identify and resolve individual settlement unit errors.

CTCT continues to work with the SAP Architects and Solutions Analyst to identify the causes of the defects and find a solution. Because this issue has been present for several audits in a row, I have repeated the previous audits recommendation to improve visibility.

Recommendation	Description	Audited party comment	Remedial action
<p>CTCT</p> <p>SAP settlement unit issues</p>	<p>CTCT</p> <p>Investigate the issues preventing SAP settlement units being updated correctly for unmetered load, reconnections and disconnections and determine a solution.</p>	<p>We will follow-up with our SAP technical team regarding the MyAwhi ticket we raised for a review of E_HHE Settlement Units with Manual flags. The review is to identify a potential SAP solution which would significantly change functionality of Settlement Unit Triggers/Change Pointers to automatically update all Settlement Unit Types automatically.</p> <p>Until a more permanent SAP solution has been identified/deployed, our Energy Reconciliation team will complete a one-off exercise to correct all long term ICP's for this exception scenario, as well as implement a new process to manage these going forward.</p>	<p>Investigating</p>

ICP days are reviewed by comparing the ICP days reported to a registry list with history and using the exception management tool. Any exceptions are investigated and corrected. Issues most commonly occur due to incorrect settlement unit information in SAP.

The process for the calculation of ICP days was examined by checking 100 NSPs with a small number of HHR ICPs and 100 NSPs with a small number of NHH ICPs on the November 2023 initial submission against the expected active days calculated using a registry list with history. I found one NHH NSP ICP days difference and 11 HHR NSP ICP days differences where SAP contained incorrect settlement units resulting in ICP days reporting errors. SAP is configured to prevent manual updates to settlement units for commercial and industrial ICPs, but AMI ICPs are also sometimes affected. This prevents users from being able to add disconnection or reconnection settlement units under certain circumstances for HHR and AMI ICPs. The issue is currently under investigation with the SAP team. The settlement units and status for ICP 1001125144UN43A has been corrected, but a further 11 ICPs¹⁴ have incorrect settlement units in SAP resulting in inactive ICP days being reported.

The following table shows the ICP days difference between CTCT files and the RM return file (GR100) for all available revisions for 22 months. Negative percentage figures indicate that the CTCT ICP days figures are higher than those contained on the registry. The discrepancies are small.

Month	Initial	R1	R3	R7	R14
Feb 2022	-0.84%	-0.86%	-0.82%	-0.82%	-0.81%
Mar 2022	-0.85%	-0.87%	-0.83%	-0.83%	-0.84%
Apr 2022	-0.84%	-0.85%	-0.85%	-0.86%	-0.86%
May 2022	-0.89%	-0.89%	-0.89%	-0.88%	-0.88%
Jun 2022	-0.89%	-0.89%	-0.89%	-0.89%	-0.42%
Jul 2022	-0.91%	-0.92%	-0.92%	-0.92%	-0.30%
Aug 2022	-0.94%	-0.95%	-0.94%	-0.94%	-0.30%
Sep 2022	-0.95%	-0.96%	-0.96%	-0.96%	-0.26%
Oct 2022	-0.97%	-0.98%	-0.96%	-0.97%	-
Nov 2022	-1.00%	-0.98%	-0.99%	-1.00%	-
Dec 2022	-1.00%	-1.02%	-1.01%	-1.02%	-
Jan 2023	-1.03%	-1.04%	-1.06%	-0.55%	-

¹⁴ ICPs 1002000168TC149, 0006657540RNEB7, 1001274912UN3D0, 0001610340WM46B, 0001433154UN22A, 000223048UNDA2, 0000008033TC2AC, 0000123008TC9C1, 0000008039ED24A, 1001153745CK57D and installation 3000456555.

Month	Initial	R1	R3	R7	R14
Feb 2023	-1.02%	-1.03%	-1.04%	-0.29%	-
Mar 2023	-0.98%	-1.00%	-1.01%	-0.25%	-
Apr 2023	-1.13%	-1.14%	-1.14%	-0.29%	-
May 2023	-0.97%	-0.96%	-0.52%	-	-
Jun 2023	-0.80%	-1.17%	-0.29%	-	-
Jul 2023	-0.58%	-0.53%	-0.29%	-	-
Aug 2023	-0.32%	-0.35%	-0.31%	-	-
Sep 2023	-0.36%	-0.37%	-	-	-
Oct 2023	-0.31%	-0.33%	-	-	-
Nov 2023	-0.27%	-	-	-	-

I checked a sample of ten HHR and ten NHH differences at April 2023 revision 7. The differences related to settlement unit discrepancies including HHR vs NHH and Inactive vs active status. The issues causing the inaccurate status or submission type settlement units are under investigation and corrections will be carried out for the individual ICPs.¹⁵

CTCS

HHR and NHH ICPs are recorded on separate reports.

ICP days submissions are validated against registry information using Power BI reporting at ICP level. Any exceptions are investigated to determine whether correction is required, and any issues are added to the issues register. CTCS also compares NHH ICP days revision submissions to the previous submission for the same period and adds zero lines as necessary if an aggregation row appeared in the previous revision but not the current one. Zero lines for HHR ICP days are automatically inserted by DataHub.

After each submission CTCS reviews the GR100 ICP days comparison reports and endeavours to resolve any issues by revision 7 at the latest.

The process for the calculation of ICP days was examined by checking 100 NSPs with a small number of HHR ICPs and 100 NSPs with a small number of NHH ICPs on the November 2023 initial submission against

¹⁵ ICPs 0037932438PC6A1, 0037932438PC6A1, 001704740WM267, 0001112974WMED8, 000009021EDB53, 007130551RNDD5, 0007109719RNAEF, 0006657540RNEB7, 0006671187RN49E, 0000568548WT532, 0015726032EL614, 0000568552WTD0E, 0000572719WTDD9 (all HHR Apr 2023) and 0000062736CP218, 0007071019AL067, 00006653430RN46E, 0006653448RN327, 0007107483RNC5A, 0007157557RNA62, 0007202052RNAC8, 0007130551RNDD5, 0006671187RN49E, 0000304165BU9DD, 0004863220BU622, 0000591248TPD2E, 0006494027TPBD2, 0001201408TUDD9, 000160142TC984 (all NHH April 2023).

the expected active days calculated using a registry list with history. The ICP days submissions were confirmed to be correctly aggregated.

The previous audit found an ICP days difference for TSA0011 in January 2023 because an ICP with only generation connected was invalidly included in the report. I confirmed that the issue was corrected and there were no ICP days differences at the NSP in subsequent revisions.

The following table shows the ICP days difference between CTCS files and the RM return file (GR100) for 21 months. Negative percentage figures indicate that the CTCS ICP days figures are higher than those contained on the registry, due to SB (residual load) ICPs being included in the registry values but correctly excluded from submission information.

I reviewed all ICP differences in the April 2023 revision 7 submission and confirmed that they related to SB (residual load) ICPs included in the registry information but not submission information.

Month	R1	R3	R7	R14
Feb 2022	-	0.02%	0.02%	0.02%
Mar 2022	-	0.01%	0.02%	0.04%
Apr 2022	0.06%	0.03%	0.02%	0.02%
May 2022	0.01%	0.02%	0.02%	0.02%
Jun 2022	0.04%	0.02%	0.02%	0.02%
Jul 2022	-0.09%	0.02%	0.00%	0.00%
Aug 2022	-0.08%	0.00%	0.00%	0.00%
Sep 2022	0.13%	0.13%	0.13%	0.13%
Oct 2022	0.16%	0.14%	0.16%	-
Nov 2022	0.12%	0.11%	0.12%	-
Dec 2022	0.11%	0.12%	0.11%	-
Jan 2023	0.08%	0.11%	0.11%	-
Feb 2023	0.13%	0.14%	0.11%	-
Mar 2023	0.40%	0.11%	0.11%	-
Apr 2023	0.19%	0.15%	0.16%	-
May 2023	0.11%	0.13%	-	-

Month	R1	R3	R7	R14
Jun 2023	0.15%	0.15%	-	-
Jul 2023	0.15%	0.15%	-	-
Aug 2023	0.15%	0.15%	-	-
Sep 2023	0.13%	-	-	-
Oct 2023	0.22%	0.11%	-	-

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 11.2</p> <p>With: Clause 15.6</p> <p>From: 01-Nov-23</p> <p>To: 30-Nov-23</p>	<p>CTCT</p> <p>For November 2023 I found one NHH NSP ICP days difference and 11 HHR NSP ICP days differences out of a sample of 100 NHH and 100 HHR NSPs checked where SAP contained incorrect settlement units resulting in ICP days reporting errors.</p> <p>For April 2023 revision 7 I found 20 out of 20 differences between the registry and submission data occurred because SAP contained incorrect settlement units resulting in ICP days reporting errors.</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 overall. Workarounds are in place to identify and correct ICPs with missing or incorrect settlement units and submission types, but they are not always resolved prior to submission.</p> <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><u>CTCT</u></p> <p>Contact has developed an EMT to capture exceptions that negatively impact Accuracy of Submission Information, Creation of ICP Days, and our Reconciliation Participant compliance obligations, that require a corrective action.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>	Identified

<p>Please find below some of exception reports already available via our new EMT:</p> <ul style="list-style-type: none"> • Difference between SAP and Registry ICP Days. • Profile and Submission Type Flag discrepancies between SAP and Registry. • SU (E_HHE and E_NH) discrepancies between SAP and Registry. • UML value and SU discrepancies between SAP and Registry. • UML Fact (Operand = EV_UMSETTL) discrepancies between SAP and Registry. • Status discrepancies (Active/Inactive) between SAP and Registry. • Status discrepancies between SU and registry. • Network/NSP/Loss Code discrepancies between SAP and registry. • Duplicate Registry Events in SAP. 		
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Contact will be looking to complete a one-off exercise to correct the already identified backlog of existing exceptions.</p> <p>Contact’s teams will be proactively running the EMT regularly to identify and resolve exceptions in a timely manner.</p> <p>Please find below a list of new and pre-existing exception reports to be created or migrated into the reporting tool (Retail_Q3FY24_BRP_Epic-Featues):</p> <ul style="list-style-type: none"> • Rollover and Incorrect removal meter reads. • Device registers code and Time of Use type profile discrepancies. • Default settlement units. • Correct application of Permanent Estimate (PE) readings in SAP; eliminating Forward Estimates (FE) in final washups. • Identifying new Actual (01) readings processed in SAP which don’t correctly create HE readings in CONSREC. 	<p><u>CTCT</u></p> <p>30/06/2024</p>	

<ul style="list-style-type: none"> • Incorrectly applied Manual Settlement Units in SAP preventing correct application of New Settlement Units. • Identification of Gaps in Settlement Units in SAP. • Missing Shape Profiles in SAP Submission data (forced RPS). • Implement Reconciliation Manager Return File GR090 HHR ICP Missing reporting. • I Flow on Registry - No I Device in Installed in SAP. • AMI Non-Communicating ICP's (AMI Y= N) and HHR profile/submission type. • Backdated ICP Status Changes to ACTIVE on Registry (Registry AC020 audit compliance report). • Additional Registry Analyst exceptions (17 exception types). 		
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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

There were no alleged breaches for late provision of billed information.

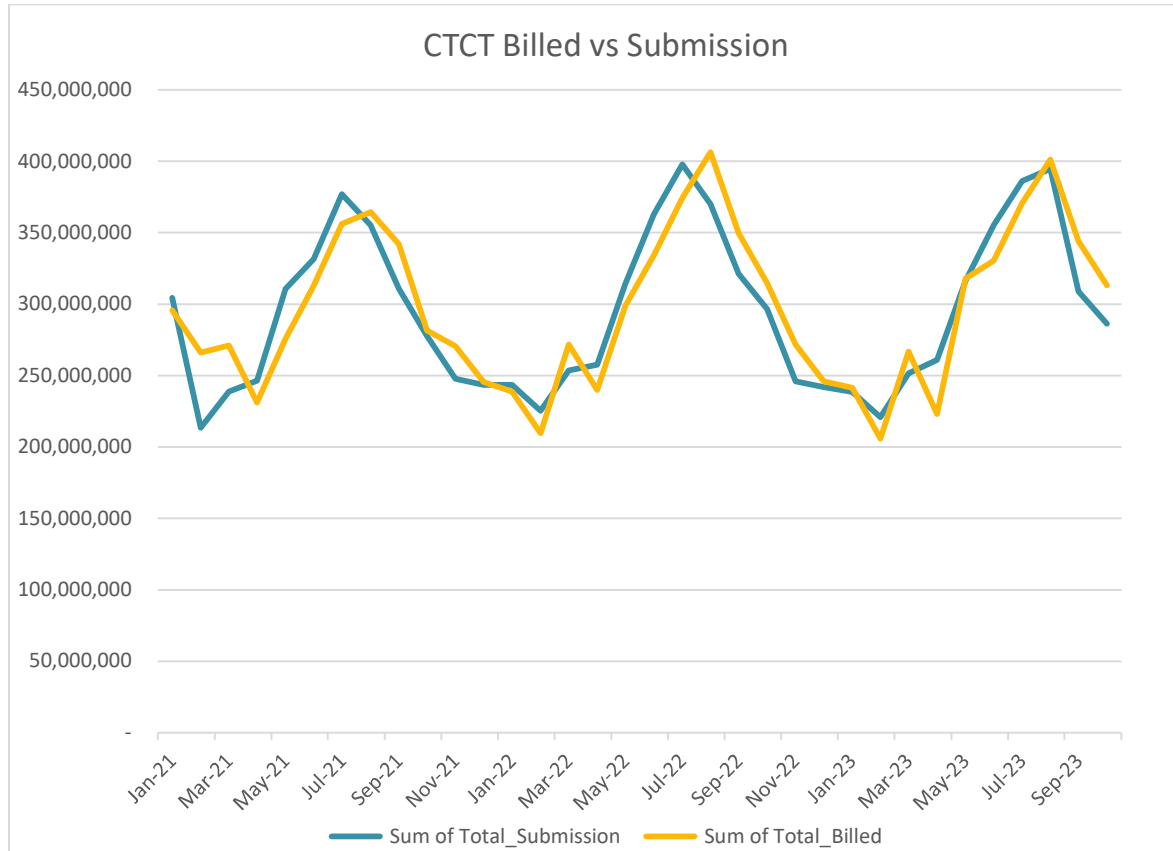
CTCT

The accuracy of the electricity supplied information was checked by comparing the November 2023 AV120 submission to invoice data for five NSPs. Compliance is confirmed.

Contact monitors billed data against submission data on a rolling 12-month basis periodically with the last check completed in May 2023. A one-month offset is applied so that the billing and reconciliation periods are aligned, and any large discrepancies at balancing area level are investigated.

Comparison between submitted and billed kWh

The chart below shows a comparison between submissions and electricity supplied information. At an aggregate level, billed data is 0.7% higher than submitted data for the 12-month period ending November 2023 and 0.6% higher than submitted data for the 24-month period ending November 2023. The relationship between billed and submitted data appears reasonable.



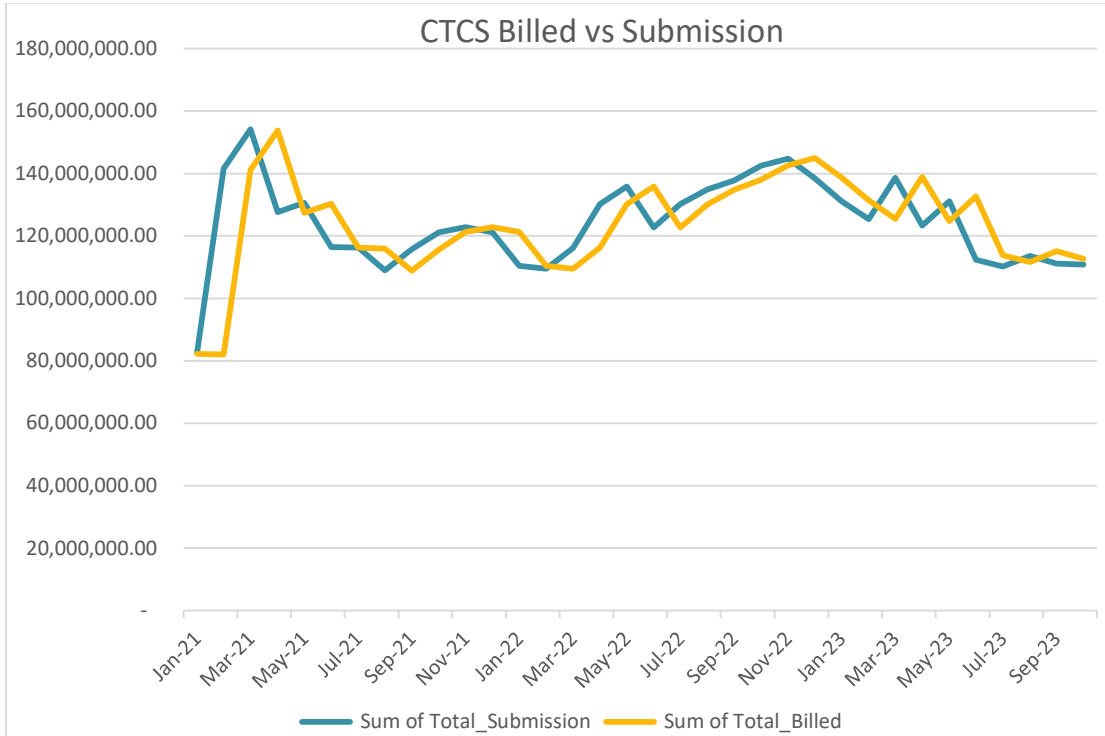
CTCS

The accuracy of the electricity supplied information was checked by comparing the November 2023 AV120 submission to detailed ICP level AV120 data and matching a sample of five ICPs from the ICP level data to invoices for November 2023. Compliance is confirmed.

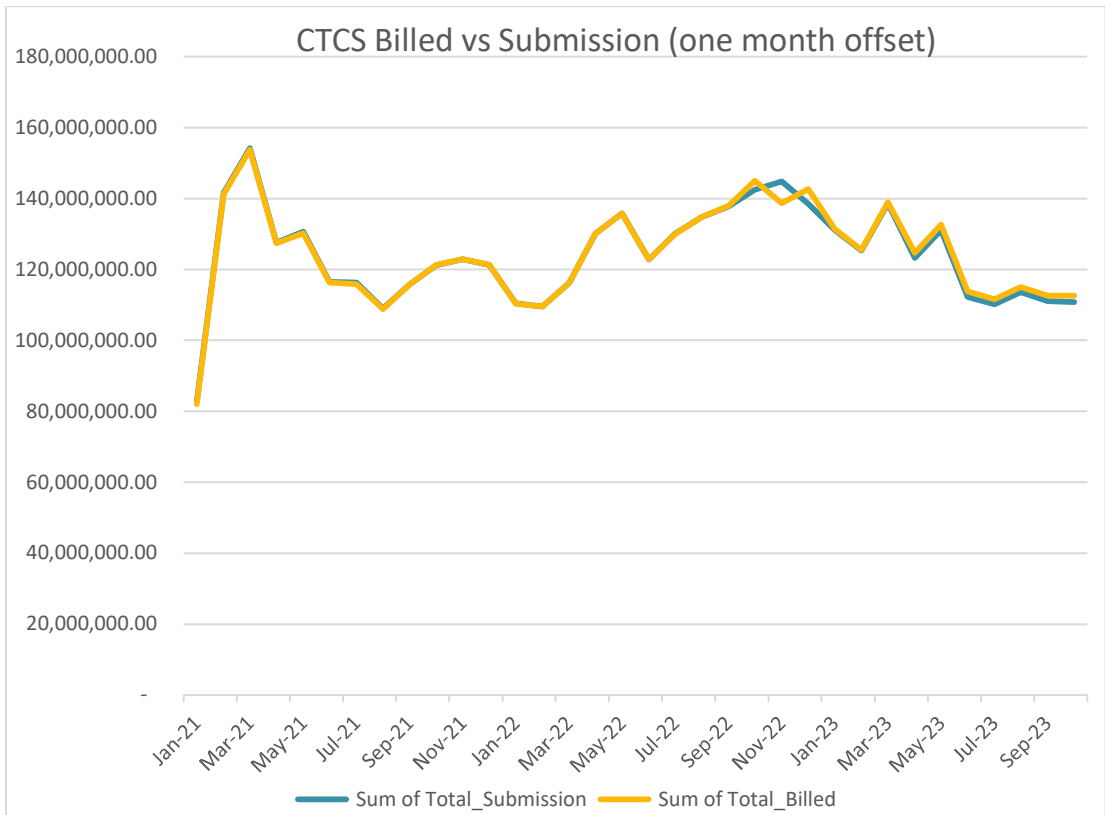
At the beginning of each month, CTCS validates billed information from AXOS against NHH and HHR submission information at ICP and flow direction level and investigates any differences over ±70,000 kWh. AV120 submissions are also validated for negative consumption. Notes are added to the spreadsheet explaining the reasons for the differences, which are often due to timing, or billing being held while issues are resolved while reconciliation submission continues and then is washed up.

Comparison between submitted and billed kWh

The chart below shows a comparison between submissions and electricity supplied information. At an aggregate level, billed data is 2.5% higher than submitted data for the 12-month period ending October 2023 and 0.7% higher for the 24-month period ending October 2023.



When billed and submitted data is aligned, there is a very small difference between the billed and submitted data.



Audit outcome

Compliant

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

Code reference

Clause 15.8

Code related audit information

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

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

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

Audit observation

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 and 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

There were no alleged breaches for late provision of HHR aggregated and volumes submissions.

CTCT

HHR volumes and aggregates submissions are produced using SAP.

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 eight submissions. There were only small rounding differences between the volumes and aggregates. I traced a sample of interval data from the raw meter data files provided by agents and MEPs through to the submission files for ACCM, AMCI, ARCS, BOPE, COUP, FCLM, IHUB, MTRX, NGCM and SMCO, and confirmed that the data was recorded and submitted accurately.

Subtraction is used to determine the HHR load for ICP 1001157629CK617, because ICPs 1001158552CK7FD and 1001156589CKCAB have been created downstream of it. Consumption for these two metered ICPs being recorded on the metering for ICP 1001157629CK617, as well by their own metering. Until the issue is physically resolved, the HHR volumes are submitted under ICP 1001157629CK617 based on readings provided by Blue Current Assets NZ Limited and the traders for ICPs 1001158552CK7FD and 1001156589CKCAB.

CTCT monitors ICPs missing from submissions using its new exception management tool and does not actively review the reconciliation manager's GR090 ICP missing report. I checked the 40 ICPs missing from the most revisions between September 2022 and November 2023:

- 33 ICPs had GR090 reporting errors where the ICP changed between BRY0661 and ISL0661 and the report invalidly recorded the combination as missing from the registry when it was present.

To: 28-Feb-24	Controls: Moderate Breach risk rating: 2	
Audit risk rating	Rationale for audit risk rating	
Low	The controls are moderate and have improved with the use of the exception management tool. The impact is low, CTCT intends to process corrections where they have not already been completed, and revised submission data will be washed up. There is a process to accurately calculate submission data for ICP 1001157629CK617.	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>We have met with WE* to identify and review options to resolve. WE* provided information about the site configuration, the options available physically to resolve and their recommendations in regards next actions.</p> <p>We contacted the original site contact; an investigation was completed to identify current building owner/manager.</p> <p>This contact acknowledged “he is aware of the issues and specifically mentioned a meter cabinet installed that has no meters that may now be supplying two tenancies” as per info that was identified in original Accucal site visit.</p> <p>New customer responsible for building confirmed in December 2023 and contact made with the CEO to initiate discussions and Contacts suggested recommendation to resolve.</p> <p>Update as at March 2024 – We have requested two new ICP's to be created by WE* and are arranging for metering to be installed.</p> <p>11+2 ICP NSP Exceptions corrected in SAP.</p>	<p><u>CTCT</u></p> <p>30/06/2023</p>	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
<p><u>CTCT</u></p> <p>Discussions have been held with WE* to ensure that contractors follow correct processes when splitting out sites into multiple connections minimising risk of double metering occurring.</p> <p>Exception Management</p> <p>Contact has developed an EMT to capture exceptions that negatively impact Accuracy of Submission Information, Creation</p>	<p><u>CTCT</u></p> <p>Completed</p>	

of ICP Days, and our Reconciliation Participant compliance obligations, that require a corrective action.

Please find below some of the exception reports already available via our new EMT:

- Difference between SAP and Registry ICP Days.
- Profile and Submission Type Flag discrepancies between SAP and Registry.
- SU (E_HHE and E_NH) discrepancies between SAP and Registry.
- UML value and SU discrepancies between SAP and Registry.
- UML Fact (Operand = EV_UMSETTL) discrepancies between SAP and Registry.
- Status discrepancies (Active/Inactive) between SAP and Registry.
- Status discrepancies between SU and registry.
- Network/NSP/Loss Code discrepancies between SAP and registry.
- Duplicate Registry Events in SAP.

Contact will be looking to complete a one-off exercise to correct the already identified backlog of existing exceptions.

Contact's teams will be proactively running the EMT regularly to identify and resolve exceptions in a timely manner.

Please find below a list of new and pre-existing exception reports to be created or migrated into the reporting tool (Retail_Q3FY24_BRP_Epic-Featues):

- Rollover and Incorrect removal meter reads.
- Device registers code and Time of Use type profile discrepancies.
- Default settlement units.
- Correct application of Permanent Estimate (PE) readings in SAP; eliminating Forward Estimates (FE) in final washups.
- Identifying new Actual (01) readings processed in SAP which don't correctly create HE readings in CONSREC.

<ul style="list-style-type: none"> • Incorrectly applied Manual Settlement Units in SAP preventing correct application of New Settlement Units. • Identification of Gaps in Settlement Units in SAP. • Missing Shape Profiles in SAP Submission data (forced RPS). • Implement Reconciliation Manager Return File GR090 HHR ICP Missing reporting. • I Flow on Registry - No I Device in Installed in SAP. • AMI Non-Communicating ICP's (AMI Y= N) and HHR profile/submission type. • Backdated ICP Status Changes to ACTIVE on Registry (Registry AC020 audit compliance report). • Additional Registry Analyst exceptions (17 exception types). 		
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12. SUBMISSION COMPUTATION

No activity occurred for CTCX during the audit period.

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.

Audit commentary

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

CTCT

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 files with daylight savings adjustment.

MV90 applies NZST. SAP has daylight savings dates and times recorded and re-labels the interval times during daylight savings to correct to NZDT. I checked a sample of data for dates with changes to and from daylight savings in MV90, SAP, and submission data and confirmed that they were processed as expected and the correct number of trading periods were reported for each day.

CTCS

Blue Current Assets NZ Limited and EDMI 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

There were no alleged breaches for late provision of NHH volumes, HHR volumes or HHR aggregates information during the audit period. One alleged breach for late provision of grid connected generation submissions for CTCT is recorded as non-compliance in **section 12.6**.

CTCT

NHH submissions

Contact prepares NHH reconciliation submissions using reconciliation consumption generated by SAP. The processes for generating historic estimate and forward estimate were reviewed and found to be compliant, but in some cases may produce inaccurate results where underlying data including settlement units are incorrect. Submission validation processes are discussed in **section 12.3**.

NHH submission scenarios were checked by reviewing submission data for a sample of ICPs:

- vacant consumption continues to be reported,
- inactive consumption will be reported if the ICP is given “active” status for the whole of any read-to-read period with consumption; there are processes in place to identify ICPs with “inactive” consumption, but exceptions are not consistently resolved as soon as practicable,
- I flow volumes are reported with a generation profile for any ICPs which have a settled I flow register and there is an open trading notification for generation profiles at the NSP, regardless of the profile recorded on the registry,
- unmetered volumes are reported based on the unmetered daily kWh recorded in SAP for reconciliation for standard and shared unmetered ICPs; some of the individual ICPs checked on the November 2023 submission contained incorrect volumes, which are recorded as non-compliance in **section 12.7**, but process compliance is recorded in this section,
- ICPs with profiles requiring certified control devices are only submitted with those profiles if they have HHR or AMI metering or the certified control device flag is set to Y, otherwise, the “force RPS” process applies the RPS profile for submission, and
- ICPs 0000397349TPCC8 and 0003973495TPE09 have 1,5 “reconciled elsewhere” status as they are supplied by a combination of diesel generators and solar power because the network found it was uneconomical to rebuild the line, and no submission data is provided or required.

Compliance is recorded in this section because the processes to calculate and report consumption are correct.

HHR submissions

CTCT prepares HHR submissions using SAP. The process for generating submissions was reviewed and found to be compliant in **section 11.4**, but in some cases may produce inaccurate results where underlying data including settlement units are incorrect.

The previous audit had recorded non-compliance where the data is not fully investigated to determine whether the midnight reads, or interval data, is correct before making the correction. I agree that investigation should occur for large differences, but believe it is impractical to verify whether the reads or interval data is incorrect for every sum-check difference.

Generation submissions

Generation submissions are discussed in **section 12.6**, including one alleged breach for late submission of grid connected generation information.

Delivery of submission data for all ICPs that CTCT is responsible for

Submission accuracy issues are discussed in detail in **section 12.7**. There were some instances where submissions made by CTCT were incomplete:

- **ICPs missing from submissions** because of incorrect settlement units, statuses or status event dates some ICPs and volumes were excluded from submission,
- **Unreported unmetered volumes** for some ICPs with incorrect settlement units or installation facts did not have their full unmetered load reported,
- **Under reported consumption during periods with inactive status and bridging** where corrections were not processed, resulting in incorrect historic estimate, and
- **Unreported generation consumption for ICP 0000277231MP9F7** which had generation metering data available from 6 June 2023, but needs to be set up correctly in SAP before submission data can be provided and there was no I flow submission data provided for January 2024.

I re-checked the previous audit submission issues which did not recur this audit and are not already discussed above.

- ICP 0000062294NT59C was connected on 13 February 2023 and the meter has recorded consumption from 14 February 2023. The ICP was not claimed and moved to “active” status by CTCT because it is a TOU meter and expected to be supplied under CTCS. This issue has now been resolved and the ICP has been claimed by CTCS.
- ICP 0110003151EL984 reported an EFA - VT FAILURE (commonly known as a phase failure) event on 12 January 2022, and a service order was completed on 3 May 2023, but no correction was processed. CTCT has since confirmed that repeated phase failures are being caused by blown fuses, and that no consumption has occurred during the periods with phase failure and no volume correction is required. It is believed the issues may be caused by water entering the meter box during severe weather events, and if the issue recurs CTCT will request that the meter box and meters are replaced.

Older audits found 0221906002LC12A had generation present and was awaiting confirmation that generation metering has been installed. This ICP has now switched to MERX.

CTCS

NHH submissions

EMS prepares NHH submissions as an agent. NHH submission scenarios were checked by reviewing submission data for a sample of ICPs:

- vacant consumption continues to be reported,
- “inactive” consumption will be reported if the ICP is given “active” status for the whole of any read-to-read period with consumption,
- I flow volumes are correctly reported for ICPs with generation profiles and I flow metering,
- unmetered volumes are reported based on the unmetered daily kWh recorded on the registry and active ICP days, and
- all five ICPs with the reconciled elsewhere statuses are for DUML ICPs which appear on the DUML audit register, with aggregated capacity reported under another ICP.

Compliance is recorded in this section because the processes to calculate and report consumption are correct.

HHR submissions

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**.

Compliance is recorded in this section because the processes to calculate and report consumption are correct.

Delivery of submission data for all ICPs that CTCS is responsible for

Submission accuracy issues are discussed in detail in **section 12.7**. There were some instances where submissions made by CTCT were incomplete:

- **one HHR estimate was not generated** because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39, and
- **incomplete corrections for backdated status and trader updates** where part of the affected period had already had final submissions.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.2 With: Clause 15.4 From: 01-Apr-23 To: 28-Feb-24	CTCT and CTCS Some submission information was not complete and accurate due to data accuracy issues. Potential impact: High Actual impact: High Audit history: Multiple times Controls: Moderate Breach risk rating: 6		
Audit risk rating	Rationale for audit risk rating		
High	The controls are moderate overall, the system processes to generate submission data are generally accurate, and the issues are mainly caused by data accuracy issues for individual ICPs or isolated scenarios (such as ICPs supplied for one day by CTCS). Contact is working to investigate issues and improve controls, including improving processes to identify and correct data accuracy errors so that revised submission data can be provided. The impact is high based on the volume differences identified and that some corrections have not yet been completed.		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>CTCT</u> Contact has developed an EMT to capture exceptions that negatively impact Accuracy of Submission Information, Creation of ICP Days, and our Reconciliation Participant compliance obligations, that require a corrective action. Please find below some of exception reports already available via our new EMT:		<u>CTCT</u> Ongoing	Identified

<ul style="list-style-type: none"> • Difference between SAP and Registry ICP Days. • Profile and Submission Type Flag discrepancies between SAP and Registry. • SU (E_HHE and E_NH) discrepancies between SAP and Registry. • UML value and SU discrepancies between SAP and Registry. • UML Fact (Operand = EV_UMSETTL) discrepancies between SAP and Registry. • Status discrepancies (Active/Inactive) between SAP and Registry. • Status discrepancies between SU and registry. • Network/NSP/Loss Code discrepancies between SAP and registry. • Duplicate Registry Events in SAP. <p>Contact will be looking to complete a one-off exercise to correct the already identified backlog of existing exceptions.</p> <p>Contact's teams will be proactively running the EMT regularly to identify and resolve exceptions in a timely manner.</p> <p><u>CTCS</u></p> <p>One HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39</p> <p>The Simply Energy Operations Team worked with both the MEP and previous trader when ICP 0000545550NRC39 switched in but were not able to confirm till a later date whether the metering details uploaded to the Registry were accurate. This was why no estimation was provided in the initial Reconciliation. This issue was not resolved until Revision 3. Simply's normal process when there is missing TOU data at first submission is to estimate based on RFP information however the team were not confident loading estimated data into the metering configuration as received from the Registry given there was concern that this was inaccurate.</p> <p>Incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions</p>	<p><u>CTCS</u></p> <p>N/A</p>	
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<p>One HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39</p> <p>Simply believes this issue was a one-off as normal process would have provided an estimate for the interim reconciliation on all TOU ICPs.</p> <p>Incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe.</p>	<p>N/A</p> <p>Ongoing</p>	
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12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

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

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 the aggregated submission data for five aggregation rows against detailed ICP data. Compliance is confirmed.

SAP automatically creates a zero line where a trading notification is open, but no aggregation line is present. Comparing GR170 files to AV080 files for eight revisions confirmed that zeroing is occurring as required.

CTCT 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, and CTCT 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.

The pre-submission checks are as follows:

- missing profile shapes, which are added,
- NSPs with no current contract in place, which are resolved by issuing trading notifications,
- invalid profiles for the AV080 (such as HHR) which are corrected,
- loss factor codes which are inconsistent with the network code or missing, which are corrected,
- inconsistent distributed generation information including invalid flow direction, inconsistencies between profiles and flow directions, and no contracts in place, which are investigated and corrected,
- historic estimate > total estimate is checked and corrected,
- ICPs using over 6,000 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 and the number of exceptions identified by this check has been decreasing over time - these checks also identify ICPs with high forward estimate, and
- 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.

Once reviewed and any data issues resolved, a revised AV080 is produced from the database. This is entered into an Excel based AV080 check worksheet for further review. For initial submissions, volumes for each NSP are compared to the previous month and any variances greater than $\pm 500,000$ kWh and $\pm 50\%$ are reviewed. For revision submissions, volumes for each NSP are compared to the previous submissions for the month, and any variances $\pm 50,000$ kWh and $\pm 5\%$ are reviewed from revision 3. Once the checks are complete, the check file is independently reviewed.

Once all checks are complete, the file is saved as csv, run through the file checker and submitted.

I checked the process for NHH to HHR upgrades, and HHR to NHH downgrades, and found all consumption was captured and reported for the ICPs checked.

ICPs assigned to the default seasonal shape profile were reviewed. In some instances, SAP cannot identify a valid seasonal shape profile to assign and applies a default flat shape profile to the ICP. The reconciliation manager provides shape values for NSP-network-profile combinations that a trader has had active ICPs on for each day. Sometimes where network ownership changes occur, the NSP information is not correctly set up in SAP, or the ICP has switched out and then back with different attributes, there can be replication issues preventing SAP from being able to apply the profiles.

The number of ICPs where default profiles are applied is reducing over time and are usually identified and resolved by revision 1. I checked the 15 ICPs with default profiles applied in September 2023 and found they related to NSPs which had changed network owner and the new owner had not been set up in time, or the ICP had previously been supplied with different attributes.

HHR Submissions

Most of the ICPs submitted as HHR have category one or two AMI metering. Of the three ICPs with meter category three or higher, ICP 1001157629CK617 has HHR data supplied by Blue Current Assets NZ Limited as an agent and the other two ICPs are generation sites read by CTCT.

Submissions are validated by loading submission and registry list information into an Access Database and using a suite of queries to:

- compare volume kWh and percentage changes at NSP level to the previous six months for initial submissions or previous submissions for the same month for revisions, drilling down to review pivot charts and detailed information where necessary; generally, differences over 10% are reviewed,
- check that the expected number of trading periods are present, including where there are daylight savings changes and investigating any discrepancies,
- check that the expected number of days are present for each aggregation factor combination,
- check for aggregation factor combinations without an open trading notification, and open trading notifications without an aggregation factor row,
- check that all rows have a valid loss factor and profile and update as necessary,
- check against aggregation rows in the previous month and insert zero records as necessary,
- check that the final data ready to be submitted matches the original where corrections have been processed,
- match the AV090 and AV140 totals for consistency, including checking any NSP level differences which are more than ± 1 kWh, and
- check the AV140 file at ICP level against the previous months for initial submissions and previous submissions for the same month for revisions; any differences over $\pm 20,000$ kWh are checked.

Once the checks are complete, the check file is independently reviewed. Prior to submission, the submission files are also run through the file checker on the RM portal.

Generation submission

Generation submissions are reviewed as discussed in **section 9.6**.

CTCS

NHH submission

The process for aggregating the AV080 was checked by reviewing five NSPs with a small number of ICPs, and compliance is confirmed.

SalesForce is checked twice daily for new ICPs, and staff check that all information is populated so that the ICPs can be transferred into MADRAS. ICPs remain on the screen until all information required is populated. Data consistency checks between SalesForce, MADRAS and registry list file records are completed prior to business days 4 and 13 using the MADRAS dashboard in SalesForce, including checking:

- 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 or CTCS 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 workflows 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.

Validated reads are sent to EMS at least weekly, and the "PushActual" process ensures that all readings which have been entered, modified, removed, or invalidated since the process was last run are sent to MADRAS. MADRAS only uses one actual reading per day. If multiple reads occur on the same day, the reads are sent in order of preference with agreed switch readings and then permanent estimates taking precedence. Where there are multiple readings on the same day with the same read type the most recently entered read is sent.

EMS provides a file of reported volumes by ICP-meter-register to support its submission files, which is reviewed for reasonableness by CTCS including:

- comparing to NSP volumes for previous months for initial submissions and checking any differences over $\pm 30,000$ kWh and $\pm 80\%$,
- comparing to NSP volumes for previous submissions for the same month for revision submissions and checking any differences over $\pm 10,000$ kWh and $\pm 12.5\%$, and
- reviewing any ICPs which do not have 100% historic estimate by revision 14 to determine whether any actual readings are available.

Any volume discrepancies are investigated by checking the ICP-meter-register level volume reporting to determine the ICPs causing the difference which are then checked. The reconciliation manager is provided an explanation if any material differences are identified, and CTCS tracks any investigations and corrections in the RM issues log. The RM issues log records any ICPs with issues that impact on submission which may or may not require resolution such as non-communicating AMI meters, decommissioned ICPs awaiting final readings, and status issues. The log contains notes on action taken to resolve the issue and further action required and is worked through prior to each revision submission.

Aggregation row combinations which have appeared in the previous submission but not the current revision, are identified through the submission validation process. The missing rows are entered into the current revision with a zero value. Once the row has been zeroed once, it is not added to subsequent revisions because the row has already been zeroed in the reconciliation manager's database. Comparing GR170 files to AV080 files for eight revisions confirmed that zeroing is occurring as required.

EMS uploads the NHH submission data to the reconciliation manager once they receive confirmation that CTCS have completed their checks and that these files can now be loaded.

HHR submission

HHR aggregates and volumes submissions are produced by CTCS from DataHub. ICP missing files are reviewed by CTCS, and data corrections are completed as necessary.

CTCS validates the HHR submission information calculated by DataHub prior to submission using their HHR volume check spreadsheet, including:

- comparison of ICP-flow direction submission data to the previous submission(s) for the month for revisions, and previous month for initial submissions; any combinations with differences of more than $\pm 20\%$ and 30,000 kWh or any over 50,000 kWh are checked unless the ANZSIC code indicates that they are an irrigation ICP,
- TOU estimates for ICPs with meter category three or above, or with AMCI as the MEP are checked for reasonableness and to determine whether actual data is available, and
- checking the maximum value per trading period appears reasonable.

I saw evidence that these checks are operating effectively and that issues were being found, investigated and resolved prior to submission.

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

CTCT provides NSP volumes for the FND0012 interconnection point between the TASM and NELS networks. The interconnection point is rarely open, and zero is usually reported. If the interconnection point is used NELS provides SCADA data to CTCT for use in the submissions.

I checked a sample of submission data and confirmed that zero was correctly reported. There were no estimates, corrections or issues during the audit period and no late submissions were identified.

CTCS

EMS produces the submissions as an agent and the submissions are uploaded to the RM portal by CTCS. There have been no corrections, estimates, or issues affecting accuracy and 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

CTCT

AV130 submission process

I walked through the submission process. Each morning, MV90 is checked to ensure that meter data has been collected including meter event log information, and that the data has been validated. The validation meets the requirements of the code and is described in **section 9.6**.

The validated MV90 data is exported to Oracle and SAP, and then submission information is generated from SAP. I walked through the process and traced a sample of data from MV90 through to SAP and submission files.

Before submission, the SAP data is validated against MV90/Oracle data in a spreadsheet to confirm that there are only very small rounding differences.

Alleged breach 2307CTCT1

The Authority recorded alleged breach 2307CTCT1 on 18 July 2023 because grid connected generation submission information for new power station Tauhara B (TAB2201) was not provided by the submission deadline in July 2023 under clauses 15.11(a) and 15.18.

At the time of the breach the power station was under construction and had not been commissioned. Two meters had been installed but not certified, and a further five meters were to be installed, and no metering data was being provided to CTCT.

The reconciliation manager was expecting submission data from June 2023 onwards because Transpower had communicated a 20 June 2023 start date for the power station. Contact asked Transpower to update the reconciliation manager and change the date, but they refused. To resolve the

issue, CTCT manually produced AV130 NSP volumes files with zero volumes until the power station was operating. There was no market impact.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.6 With: Clause 15.11 From: 20-Jun-23 To: Jul-2024	CTCT Alleged breach 2307CTCT1. 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 strong, the issue occurred because an incorrect start date was provided to the reconciliation manager by another party. The impact is low. CTCT has manually produced zero submissions because the ICP has not been commissioned, and they could not arrange for the incorrect start date to be amended.		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>CTCT</u> Despite Contact's objections to the start dates advised by Transpower to the Reconciliation Manager, we chose to submit zero data for TAB2201 upon the RM's warning of potential breach consequences. However, despite our actions, a breach was reported by the RM. Subsequent events have validated Contact's initial stance as the new stations was not operational to receive power from the Grid until late October 2023.		<u>CTCT</u> 18/07/2023	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<u>CTCT</u> In future instances, Contact will assertively advocate that Transpower and the Reconciliation Manager follow the advice that they have been provided.		<u>CTCT</u> 18/07/2023	

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

Processes are in place to validate submission data, and correct errors prior to submission which are discussed in **sections 2.1, 8.1 and 8.2**. One alleged breach for late provision of grid connected generation submissions for CTCT is recorded as non-compliance in **section 12.6**.

CTCT

Some submission data was found to be inaccurate and was not corrected at the next available opportunity for submission.

Issue	Estimated submission impact ¹⁶
<p>Incorrect statuses or status event dates</p> <p>Submission only occurs for ICP days where the ICP has "active" status. If part of a read-to-read period with consumption is "inactive" some of the consumption will be apportioned to the "inactive" days and excluded from submissions. If a status date is incorrect, consumption may not be allocated to the correct submission period.</p> <p>When reviewing historic estimate scenarios, I identified two ICPs where part of the read to read-to-read period consumption was allocated to "inactive" days and excluded from submission. 000006164DEED7 had 5.34 kWh unreported because it was allocated to an "inactive" day, and 0000001419ENFFA had 58.36 kWh unreported because it was allocated to an "inactive" day.</p> <p>Two new connections with incorrect "active" status dates were not corrected as soon as practicable after discovery during the audit, and 13 new connections found to have incorrect active status dates during the previous audit have either not been corrected, or not corrected in both SAP and the registry. This has resulted in unreported consumption and consumption being apportioned to incorrect periods. The ICP details are recorded in appendix 15.3.</p> <p>ICP 0000434474TPA6A had an incorrect update to "active" status on 4 December 2022 because a misread was supplied by the meter reader. It should have had "inactive" status throughout and has not been corrected. There is no impact on volume submissions, but incorrect ICP days have been reported.</p> <p>Investigation and correction for ICPs with "inactive" consumption does not always occur as soon as practicable resulting in under submission of consumption allocated to periods with "inactive"</p>	High

¹⁶ Minor (less than ±500 kWh), low (less than ±10,000 kWh), medium (less than ±50,000 kWh) or high (more than ±100,000 kWh).

Issue	Estimated submission impact ¹⁶
<p>status. CTCT’s reporting shows there are currently 636 ICPs with 549,610 kWh of “inactive” consumption which require investigation and correction. I checked a sample of ICPs with “inactive” consumption and found that not all required corrections were processed. The affected ICPs are listed in appendix 15.1.</p>	
<p>Incorrect unmetered load settlement units or installation facts</p> <p>To be included in NHH submissions, unmetered ICPs need to have a valid unmetered settlement unit and installation facts. Assignment of unmetered load settlement units can become corrupted resulting in either missing settlement units, or settlement units not being end dated once the unmetered load is removed.</p> <p>The previous audit found 102 ICPs where the unmetered load settlement unit assignment was missing resulting in an under submission of 36,658 kWh per annum, and 235 ICPs where the unmetered load settlement unit assignment was not end dated on the removal of the unmetered load resulting in an over submission of 45,460 kWh per annum. This audit found 36 ICPs with settlement unit issues:</p> <ul style="list-style-type: none"> • seven did not have their unmetered load settlement unit end dated when an unmetered BTS supply or another unmetered load was removed, • six had unmetered load on the registry but did not have an unmetered load settlement unit in SAP, and • the remainder had unmetered load settlement units in SAP. but no unmetered load recorded by the distributor in the registry. <p>Tickets have been raised to investigate and resolve these issues.</p> <p>Two updates to unmetered load details were backdated by more than 14 months, and no correction was processed to capture the change in volume for reconciliation periods which had already undergone a final allocation:</p> <ul style="list-style-type: none"> • ICP 0000180737HBA90 underwent a minor change to its daily unmetered kWh from 1.47 to 1.486 kWh per day from 3 September 2019 to resolve a historic rounding issue in the calculation; the impact on submission for the period that fell outside the 14-month revision window is under submission of approximately 14 kWh, and • ICP 0007159037RN857’s unmetered load removal was backdated more than 14 months; the impact on submission for the period that fell outside the 14-month revision window is over submission of approximately 86 kWh. <p>Some ICPs had incorrect unmetered load installation details recorded, resulting in incorrect submission data:</p> <ul style="list-style-type: none"> • ICP 0007206698RNF30 became a metered supply on 15 November 2022 (during the previous trader’s period of supply) and should have had its unmetered load removed by CTCT from the switch in date, 4 December 2022; instead. the unmetered load was removed from 9 January 2023 which still needs to be corrected and has resulted in over submission of 55.44 kWh between the switch in date and 8 January 2023, • ICP 0000441035MP771’s unmetered load in SAP was calculated incorrectly, resulting in under submission of 0.781 kWh per day since 8 November 2021 because CTCT had accounted for the number of ICPs sharing the load twice, • ICP 0006000102HB2F1’s unmetered load was recorded incorrectly in SAP resulting in under submission of 0.107 kWh per annum since it switched in on 3 March 2022, and • ICP 0900090608PC5E4 had incorrect unmetered load reported due to duplicated installation facts, resulting in over submission of 0.465 for September 2023. 	<p>Medium</p>

Issue	Estimated submission impact ¹⁶
<p>Incorrect submission type or status settlement units</p> <p>SAP's settlement units specify the submission parameters (e.g., active HHR, inactive NHH) for each time slice and determine whether the ICP has volume and ICP days submission data produced, and which reports that data appears on.</p> <p>CTCT has found some intermittent issues with the creation of settlement units, including the auto triggers not working correctly for some disconnections and reconnections, and the grid settlement unit flag preventing some disconnection settlement unit updates. Submission will be correct once the settlement units have been updated, and the reconciliation team's validation processes help to identify and resolve individual settlement unit errors.</p> <p>For November 2023 I found one NHH NSP ICP days difference and 11 HHR NSP ICP days differences out of a sample of 100 NHH and 100 HHR NSPs checked where SAP contained incorrect settlement units resulting in ICP days, HHR volumes and NHH volumes reporting errors.</p> <p>For April 2023 revision 7 I found 20 out of 20 differences between the registry and submission data sampled occurred because SAP contained incorrect settlement units resulting in ICP days, HHR volumes and NHH volumes reporting errors.</p> <p>The affected ICPs will be corrected and are listed in section 11.2.</p>	Medium
<p>Consumption not estimated for periods where meters were bridged</p> <p>There were 25 ICPs where the meter had been bridged but not unbridged. Service orders were raised for all ICPs except those which switched away or were disconnected. Corrections to capture the bridged consumption will be made once the service orders are complete, and the volume of bridged consumption is unknown.</p> <p>There were 133 ICPs where the meter had been bridged and unbridged during the audit period. 11 ICPs did not have corrections processed, and one ICP had a correction processed but the wrong read type was applied. Based on 451 days of bridged consumption I assess the impact to be medium. The affected ICPs are listed in appendix 15.2.</p>	Medium
<p>Application of default profiles instead of seasonal adjusted shape values</p> <p>In some instances, SAP cannot identify a valid seasonal shape profile to assign and applies a default flat shape profile to the ICP. The reconciliation manager provides shape values for NSP-network-profile combinations that a trader has had active ICPs on for each day. Sometimes where network ownership changes occur, the NSP information is not correctly set up in SAP, or the ICP has switched out and then back with different attributes, there can be replication issues preventing SAP from being able to apply the profiles.</p> <p>The number of ICPs where default profiles are applied is reducing over time and are usually identified and resolved by revision 1. I checked the 15 ICPs with default profiles applied in September 2023 and found they related to NSPs which had changed network owner and the new owner had not been set up in time, or the ICP had previously been supplied with different attributes.</p>	Low
<p>Unreported generation consumption</p> <p>ICP 0000277231MP9F7 has generation metering data available from 6 June 2023, but needs to be set up correctly in SAP before submission data can be provided. There was no I flow submission data provided for January 2024.</p>	Low

Issue	Estimated submission impact ¹⁶
<p>Invalid default forward estimate</p> <p>Default forward estimate of 25 kWh per day is submitted on the AV080 where meter readings are not available to calculate historic estimate, and there is insufficient read or average daily kWh for SAP to calculate a forward estimate based on the ICP's own consumption.</p> <p>ICP is 004052459BU0D5 was decommissioned but had default forward estimate calculated and reported in June 2022.</p> <p>ICPs 0000010521CEE06 TPW1700198 register 3 (June 2022) and 0000000830CE507 N200045454 register 4 (July and August 2022) had default forward estimate submitted, but actual meter readings were gained for the ICPs' open meter registers in SAP.</p>	Low
<p>Unapproved submission by subtraction</p> <p>Subtraction is used to determine the HHR load for ICP 1001157629CK617, because ICPs 1001158552CK7FD and 1001156589CKCAB have been created downstream of it. Consumption for these two metered ICPs being recorded on the metering for ICP 1001157629CK617, as well by their own metering. Until the issue is physically resolved, the HHR volumes are submitted under ICP 1001157629CK617 based on readings provided by Blue Current Assets NZ Limited and the traders for ICPs 1001158552CK7FD and 1001156589CKCAB.</p>	Minor
<p>ARCS meters settled as HHR</p> <p>CTCT has 192 active ARCS HHR settled ICPs. All have metering category one, and have the multiplier flag = N. These meters are expected to be settled as NHH because ARCS data does not contain the required number of decimal places.</p>	Minor

I re-checked the previous audit submission accuracy issues which did not recur this audit and are not already discussed in the table above.

2023 audit issue	2024 audit findings
Active ICP which has not been claimed and is excluded from submissions	ICP 0000062294NT59C was connected on 13 February 2023 and the meter has recorded consumption from 14 February 2023. The ICP was not claimed and moved to "active" status by CTCT because it is a TOU meter and expected to be supplied under CTCS. This issue has now been resolved and the ICP has been claimed by CTCS.
Check sum validation and correction of AMI interval data used for HHR submission	The previous audit had recorded non-compliance where the data is not fully investigated to determine whether the midnight reads, or interval data, is correct before making the correction when the data fails check sum validation. I agree that investigation should occur for large differences, but believe it is impractical to verify whether the reads or interval data is incorrect for every sum-check difference.
Correction not completed for an AMI meter event	in the previous audit report explained that ICP 0110003151EL984 reported an EFA - VT FAILURE (commonly known as a phase failure) event on 12 January 2022, and a service order was completed on 3 May 2023, but no correction was processed. CTCT has since confirmed that repeated phase failures are being caused by blown fuses, and that no consumption has occurred during the periods with phase failure and no volume correction is required. It is believed the issues may be caused by water entering the

2023 audit issue	2024 audit findings
	meter box during severe weather events, and if the issue recurs CTCT will request that the meter box and meters are replaced.
NHH meter reading application	I re-checked incorrect profile changes identified during the previous audit and confirmed that they had been corrected.

CTCS

Some submission data was found to be inaccurate and was not corrected at the next available opportunity for submission.

Issue	Estimated submission impact ¹⁷
<p>Unreported consumption because no HHR estimate was created</p> <p>CTCS does not consistently create corrections for HHR ICPs where there is insufficient history to create an estimate if they consider the difference to be immaterial.</p> <p>ICP 0000545550NRC39 switched in on 1 November 2023, with a HHR TRUM meter. No meter readings were received so CTCS attempted to obtain readings from the previous trader (who confirmed they had not received any readings), the MEP, and EDMI. Meter readings were eventually provided by AMCI from 1 January 2024. No estimated data was provided in the November 2023 initial or revision 1 submission.</p>	Low
<p>Inaccurate HHR corrections</p> <p>An incorrect correction method was used for ICPs 0311820220LC311 6 June 2023 and 0108507076LC655 3 June 2023 which had a data gap and then spike where data was pushed into the next interval creating a “double interval”. The data for the “double interval” should have been spread between the double and missing intervals, but CTCS instead estimated consumption for the missing interval based on a similar trading period.</p> <p>ICP 0007680824HBF9 had fuses blown off during a cyclone and interval data needed to be estimated from 14 February 2023 until 1 March 2023. A correction was manually calculated but was based on the same calendar day of the previous year, rather than the same day of the week.</p> <p>The upgrade for ICP 0000052134HBB2B was made effective from the wrong date. The ICP was moved to HHR from 28 June 2023 consistent with the registry metering record, but should have been moved to HHR from 27 June 2023, consumption on the HHR register for the meter change date (estimated to be less than 5 kWh) was not reported.</p> <p>CTCS intends to process corrections for these ICPs, and revised submission data will be washed up.</p>	Low
<p>Backdated status and trader updates</p> <p>Where a status or trader update affecting submission is backdated more than 14 months, a manual correction needs to be processed to capture the consumption within the 14-month submission window. CTCS considers ICPs which have backdated updates affecting submission but does not normally process a correction unless significant under submission has occurred. I identified the following corrections which were expected to be processed:</p>	Low

¹⁷ Minor (less than ±500 kWh), low (less than ±10,000 kWh), medium (less than ±50,000 kWh) or high (more than ±100,000 kWh).

Issue	Estimated submission impact ¹⁷
<p>ICP 0000007007NZ1AD backdated status update to “active” from 1 February 2022 on 12 April 2023.</p> <p>ICP 0000626629TP447 backdated status update to “inactive” from 1 February 2021 on 16 May 2023.</p> <p>ICP 0007109850WM31B backdated status update to “inactive” from 1 January 2021 on 26 May 2023.</p> <p>ICP 0000298513MPF38 backdated update to remove unmetered load when a meter was installed from 29 December 2021 on 26 May 2023.</p>	
<p>Invalid generation of forward estimate</p> <p>The reconciliation manager only provides shape values for NSP-network-profile combinations that a trader has had active ICPs on for each day. Where ICP data changes (such as where an embedded network changes ownership), MADRAS looks for shape values for the original NSP-network-profile combination for the day after the ICP has moved, although they are not needed for the calculation. Because MADRAS cannot find shape values for all days, it will treat the consumption as forward estimate. The issue is isolated and only occurs where all ICPs with that combination of attributes are moved on the same day. EMS is working on a solution.</p> <p>MADRAS can only manage one reading per day, so where an ICP is supplied for one day, forward estimate of 42 kWh is reported. ICP 0000030255WECCB switched in on 1 February 2023 with a reading of 732839,A and out on 2 February 2023 with a reading of 733352,E. 513 kWh of historic estimate was expected to be reported in the AV080, but 42 kWh of forward estimate was reported.</p>	Low
<p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>As recorded in previous audits, where DataHub receives a part of a day’s data in one file, and the remainder of the day’s data in another file, data from the earlier file is removed and estimated when the second file for the day is imported. This is primarily an issue for FCLM meters, and FCLM have confirmed that they will not change their process to provide a full day of data in the replacement file for the file format used by CTCS. A DataHub fix is being investigated to either allow import of the new part day data without removing the earlier interval data or moving to a different file format.</p>	Minor
<p>Incorrect labelling of historic estimate</p> <p>Some historic estimate volume 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, or the seasonal shape values provided for the read-to-read period are all zero values, in which case MADRAS treats zero values as nulls.</p>	Minor
<p>Incorrect historic estimate where readings were not sent to MADRAS due to timing</p> <p>For ICP 0000011643EA7E3 - April 2023, the unmetered load calculation was correct but the load for the metered register was incorrect because the meter was not created in MADRAS when the first validated readings were sent from DataHub using the “PushActual” process. The readings were not resent because the DataHub process only sends readings entered, invalidated or deleted since its “PushActual” process was run. CTCS will change the process to ensure that opening and subsequent meter readings are sent to MADRAS where there is a delay in creating the meter. The change is currently being tested, and once complete revised submission data will be washed up.</p>	Minor

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 12.7 With: Clause 15.12 From: 01-Apr-22 To: 28-Feb-24	CTCT and CTCS Some submission data was inaccurate and was not corrected at the next available opportunity. Potential impact: High Actual impact: High Audit history: Multiple times Controls: Moderate Breach risk rating: 6		
Audit risk rating	Rationale for audit risk rating		
High	The controls are moderate overall, the system processes to generate submission data are generally accurate, and the issues are mainly caused by data accuracy issues for individual ICPs or isolated scenarios (such as ICPs supplied for one day by CTCS). Contact is working to investigate issues and improve controls, including improving processes to identify and correct data accuracy errors so that revised submission data can be provided. The impact is high based on the volume differences identified and that some corrections have not yet been completed.		
Actions taken to resolve the issue		Completion date	Remedial action status
<u>CTCT</u> Contact has developed an EMT to capture exceptions that negatively impact Accuracy of Submission Information, Creation of ICP Days, and our Reconciliation Participant compliance obligations, that require a corrective action. Please find below some of the exception reports already available via our new EMT: <ul style="list-style-type: none"> • Difference between SAP and Registry ICP Days. • Profile and Submission Type Flag discrepancies between SAP and Registry. • SU (E_HHE and E_NH) discrepancies between SAP and Registry. • UML value and SU discrepancies between SAP and Registry. • UML Fact (Operand = EV_UMSETTL) discrepancies between SAP and Registry. 		<u>CTCT</u> Ongoing	Identified

<ul style="list-style-type: none"> • Status discrepancies (Active/Inactive) between SAP and Registry. • Status discrepancies between SU and registry. • Network/NSP/Loss Code discrepancies between SAP and registry. • Duplicate Registry Events in SAP. <p>Contact will be looking to complete a one-off exercise to correct the already identified backlog of existing exceptions.</p> <p>Contact’s teams will be proactively running the EMT regularly to identify and resolve exceptions in a timely manner.</p> <p>CTCS</p> <p>Unreported consumption because no HHR estimate was created</p> <p>The Simply Energy Operations Team worked with both the MEP and previous trader when ICP 0000545550NRC39 switched in but were not able to confirm till a later date whether the metering details uploaded to the Registry were accurate. This was why no estimation was provided in the initial Reconciliation. This issue was not resolved until Revision 3. Simply's normal process when there is missing TOU data at first submission is to estimate based on RFP information however the team were not confident loading estimated data into the metering configuration as received from the Registry given there was concern that this was inaccurate.</p> <p>Inaccurate HHR corrections</p> <p>The 4 HHR correction errors have been actioned following the Audit.</p> <p>Backdated status and trader updates</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe. Issues identified during the audit are being reviewed and added into this process for correction.</p> <p>Invalid generation of forward estimate / Incorrect labelling of historic estimate</p>	<p><u>CTCS</u></p> <p>N/A</p> <p>15 Mar 2024</p> <p>15 Mar 2024</p>	
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<p>Development work is pending from EMS to resolve the incorrect labelling of Historic Estimates, once this change is released, it is our expectation that historic issues going back 14 months from the date of the release will be addressed.</p> <p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>A ticket has been raised to Axos to resolve the replacement of part actual interval data. Once this change has been released, we will assess how far back data can be re-loaded to address any historical issues.</p> <p>Incorrect historic estimate where readings were not sent to MADRAS due to timing</p> <p>A ticket has been raised to resolve the missing readings not sent to Madras for ICP 0000011643EA7E3.</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Plebase find below a list of new and pre-existing exception reports to be created or migrated into the reporting tool (Retail_Q3FY24_BRP_Epic-Featues):</p> <ul style="list-style-type: none"> • Rollover and Incorrect removal meter reads. • Device registers code and Time of Use type profile discrepancies. • Default settlement units. • Correct application of Permanent Estimate (PE) readings in SAP; eliminating Forward Estimates (FE) in final washups. • Identifying new Actual (01) readings processed in SAP which don't correctly create HE readings in CONSREC. • Incorrectly applied Manual Settlement Units in SAP preventing correct application of New Settlement Units. • Identification of Gaps in Settlement Units in SAP. • Missing Shape Profiles in SAP Submission data (forced RPS). • Implement Reconciliation Manager Return File GR090 HHR ICP Missing reporting. 	<p><u>CTCT</u></p> <p>30/06/2024</p>	

<ul style="list-style-type: none"> • I Flow on Registry - No I Device in Installed in SAP. • AMI Non-Communicating ICP's (AMI Y= N) and HHR profile/submission type. • Backdated ICP Status Changes to ACTIVE on Registry (Registry AC020 audit compliance report). • Additional Registry Analyst exceptions (17 exception types). <p><u>CTCS</u></p> <p>Unreported consumption because no HHR estimate was created</p> <p>We believe this issue was a one-off as our normal process would have provided an estimate for the interim reconciliation on all TOU ICPs.</p> <p>Inaccurate HHR corrections</p> <p>An additional step has been added to the HHR corrections process to minimise any future errors in this area.</p> <p>Backdated status and trader updates</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe.</p> <p>Invalid generation of forward estimate / Incorrect labelling of historic estimate</p> <p>Development work is pending from EMS to resolve the incorrect labelling of Historic Estimates.</p> <p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>A ticket has been raised to Axos to resolve the replacement of part actual interval data.</p> <p>Incorrect historic estimate where readings were not sent to MADRAS due to timing</p> <p>A ticket has been raised to resolve the missing readings not sent to Madras for ICP 0000011643EA7E3.</p>	<p><u>CTCS</u></p> <p>N/A</p> <p>Ongoing</p> <p>Ongoing</p> <p>30 Jun 2024</p> <p>TBD</p> <p>30 Jun 2024</p>	
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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
Jun-22	354,285.29
Jul-22	91,608.37
Aug-22	100,761.00

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, but not all ICPs have permanent estimates entered by revision 14.

I checked the 15 AV080 aggregation rows with the highest proportion of forward estimate in revision 14:

- for 11 rows forward estimate remained because the meters were unable to be read because of access issues, health and safety issues, or being scheduled to be read six monthly due to their remote location,
- for one row an ICP was decommissioned but default forward estimate was applied; the affected ICP is 004052459BU0D5 (June 2022), and
- for three rows AMI reads were gained, but default forward estimate was applied; the affected ICPs are 0000010521CEE06 TPW1700198 register 3 (June 2022) and 0000000830CE507 N200045454 register 4 (July and August 2022).

The ICPs with default forward estimate are being investigated, and I have made a recommendation for visibility:

Description	Recommendation	Audited party comment	Remedial action
<p>CTCT</p> <p>Review unexpected default forward estimate for ICPs with readings</p>	<p>CTCT</p> <p>Determine why default forward estimate was applied for ICPs 0000010521CEE06 TPW1700198 register 3 (June 2022) and 0000000830CE507 N200045454 register 4 (July and August 2022) and decommissioned ICP 004052459BU0D5 (June 2022).</p>	<p>Initial investigation has shown that the cause could be a result of a device change. This will be investigated further.</p>	<p>Investigating</p>

The previous audit found an issue where forward estimate was invalidly reported for ICP 0000202101CTC81 because two readings were provided for the same day, and a meter removal reading was mislabelled as an estimate. I confirmed that the readings for the ICP have been corrected.

The existence of forward estimate at revision 14 is recorded as non-compliance below.

CTCS

ICPs with forward estimate remaining at revision 7 or 14 are identified through the NHH submission validation process discussed in **section 12.3**. CTCS checks the ICPs, and where reads are available (or can be calculated for unmetered load) they are sent to MADRAS for reconciliation. CTCS has found most ICPs which do not have 100% historic estimate do not have actual reads available.

CTCS 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. They intend to develop a process to enter permanent estimates for unread ICPs, once they are confident that they are consistently using reasonable endeavours to attempt to obtain meter readings.

Some historic estimate volume 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, or the SASV provided for the read-to-read period are all zero values, in which case MADRAS treats zero values as nulls. The incorrect labelling of historic estimate as forward estimate is recorded as non-compliance in **sections 12.7** and **12.10**.

CTCS have identified an issue within MADRAS where a change of ICP attributes, a meter change or switch away occurs. MADRAS appears to be trying to find shape data for the data after these events based on how the meter reads are recorded (MADRAS records meter reads as occurring at 00:00 hours) however the ICP time slice ends a day earlier than MADRAS believes the meter reads are for resulting in MADRAS having incomplete seasonal shape values for an ICP. The outcome is the read-to-read volume is not seasonally adjusted and the consumption volume is recorded as Forward Estimate (FE). The Vendor for MADRAS is investigating this potential bug.

Review of three AV080 14-month revisions showed that some forward estimate remained:

Month	Forward estimate
Jun-22	66432.01
Jul-22	80609.24

Month	Forward estimate
Aug-22	43690.23

I checked the 15 AV080 aggregation rows with the highest proportion of forward estimate and found that forward estimate remained because CTCS had been unable to obtain readings and no permanent estimate had been entered, or because profile shapes were not available for the whole period historic estimate was being calculated for.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 12.8</p> <p>With: Clause 4 Schedule 15.2</p> <p>From: 01-Jun-22</p> <p>To: 31-Aug-22</p>	<p>CTCT</p> <p>Some estimates were not replaced by revision 14.</p> <p>Forward estimate was incorrectly generated for ICPs 0000010521CEE06 TPW1700198 register 3 (June 2022) and 0000000830CE507 N200045454 register 4 (July and August 2022) and decommissioned ICP 004052459BU0D5 (June 2022).</p> <p>CTCS</p> <p>Some estimates were not replaced by revision 14.</p> <p>Potential impact: Medium</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	
<p>Low</p>	<p>The controls are rated as weak overall:</p> <ul style="list-style-type: none"> for CTCT there are processes to attain readings and enter permanent estimates, but not all ICPs have permanent estimates entered by revision 14. for CTCS there are processes to attain readings, but permanent estimates are not usually entered. <p>There are sound estimation processes, which will help to ensure accurate estimates, so the audit risk rating is low.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>An issue regarding our systems processes for utilizing permanent estimates has been brought to the attention of our SAP team. It has been found that under specific scenarios, the permanent estimate meter reading type was not always applied as required. Investigations into this matter are ongoing.</p>	<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Investigating</p>

<p>Our Retail Operations team is actively investigating the underlying causes for the issues impacting the 3 identified ICPs. Any necessary corrective action will be taken following the completion of said investigation.</p> <p><u>CTCS</u></p> <p>There is increased focus to the number of ICPs not read at 12 months, the number has significantly reduced. We are aiming to get this number down to zero so there is no Forward Estimates at Revision 14.</p>	<p>By 30/03/2024</p> <p><u>CTCS</u> Ongoing</p>	
<p>Preventative actions taken to ensure no further issues will occur</p>	<p>Completion date</p>	
<p><u>CTCT</u></p> <p>Reminders will be notified to Operations Teams to emphasize the importance of accurate setups during Device changes to prevent non-compliances.</p> <p><u>CTCS</u></p> <p>If we are not able to obtain reads then a new process has been implemented by the Simply Energy Customer Care Team to contact customers by two forms of communication, once this is confirmed and can be shown for all ICPs not read for 12 months then Simply Energy will generate Permanent Estimates.</p>	<p><u>CTCT</u> Ongoing</p> <p><u>CTCS</u> Ongoing</p>	

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 three 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 one or category two 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 three or higher have submission type HHR,
- ICPs with profiles requiring certified control devices are only submitted with those profiles if they have HHR or AMI metering or the certified control device flag is set to Y, otherwise, the “force RPS” process applies the RPS profile for submission,
- inactive consumption will be reported if the ICP is given access status for the whole of any read-to-read period with consumption; there are processes in place to identify ICPs with inactive consumption, but exceptions are not consistently resolved as soon as practicable,
- unmetered volumes are reported based on the unmetered daily kWh recorded in SAP for reconciliation for standard and shared unmetered ICPs,
- no loss or compensation arrangements are required, and
- aggregation of the AV080, AV110, AV090 and AV140 submissions are covered in **sections 12.3, 11.2, and 11.4** respectively.

The process to produce and submit reconciliation submissions is compliant and will aggregate the reports correctly provided that the underlying data is complete and accurate. Some submission accuracy issues affecting compliance with clause 2 schedule 15.3 have occurred because underlying data is incorrect, and the compliant submission generation process has produced inaccurate results:

- **incorrect historic and forward estimate** due to incorrect statuses or event dates,
- **incorrect aggregation of submission data** because of incorrect settlement units, which specify the submission type and whether the ICP is “active” or “inactive” and are used by SAP to determine which report(s) the ICP is included in if any,
- **incorrect unmetered load submissions**, which were not calculated from the daily unmetered kWh recorded on the registry and the number of active days in the reconciliation period because SAP recorded incorrect unmetered load settlement units or installation facts,
- **under reported consumption during periods with inactive status and bridging** where corrections were not processed, resulting in incorrect historic estimate,
- **application of default profiles instead of seasonal adjusted shape values** where the shape values were available, and
- **invalid default forward estimate of 25 kWh per day** was applied where no forward estimate was required.

The submission accuracy issues are discussed in detail in **section 12.7**.

CTCS

Compliance with this clause was assessed:

- all active ICPs with meter category three or higher have submission type HHR,
- standard unmetered volumes are reported based on the unmetered daily kWh recorded in the registry,
- distributed unmetered load submissions are prepared by EMS and compliance is recorded in their agent audit,
- no ICPs with profiles requiring certified control devices are supplied,
- no loss or error compensation arrangements are required, and
- aggregation of the AV080, AV110, AV090 and AV140 submissions are covered in **sections 12.3, 11.2, and 11.4** respectively.

The process to produce and submit reconciliation submissions is compliant and will aggregate the reports correctly provided that the underlying data is complete and accurate. Some submission accuracy issues affecting compliance with clause 2 schedule 15.3 have occurred because underlying data is incorrect, and the compliant submission generation process has produced inaccurate results:

- **one HHR estimate was not generated** because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39,
- **incomplete corrections for backdated status and trader updates** where part of the affected period had already had final submissions,
- **invalid generation of forward estimate** where MADRAS cannot find shape values or the ICP is supplied for one day,
- **replacement of actual interval data with estimates** when part day HHR data is received, and
- **incorrect calculation of historic estimate due to missing readings in MADRAS** for ICP 0000011643EA7E3 (April 2023) because some readings were not sent to MADRAS due to timing.

The submission accuracy issues are discussed in detail in **section 12.7**.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 12.9 With: Clause 2(1)(c) of schedule 12.3 From: 01-Apr-23 To: 28-Feb-24	CTCT and CTCS Some submission information was not generated accurately as required by Clause 2 Schedule 15.3 due to data accuracy issues. Potential impact: High Actual impact: High Audit history: Multiple times Controls: Moderate Breach risk rating: 6
Audit risk rating	Rationale for audit risk rating
High	The controls are moderate overall, the system processes to generate submission data are generally accurate, and the issues are mainly caused by data accuracy issues for individual ICPs or isolated scenarios (such as ICPs supplied for one day by CTCS). Contact is working to investigate issues and improve controls, including improving processes to identify and correct data accuracy errors so that revised submission data can be provided. The impact is high based on the volume differences identified and that some corrections have not yet been completed.

Actions taken to resolve the issue	Completion date	Remedial action status
<p><u>CTCT</u></p> <p>Contact has developed an EMT to capture exceptions that negatively impact Accuracy of Submission Information, Creation of ICP Days, and our Reconciliation Participant compliance obligations, that require a corrective action.</p> <p>Please find below some of exception reports already available via our new EMT:</p> <ul style="list-style-type: none"> • Difference between SAP and Registry ICP Days. • Profile and Submission Type Flag discrepancies between SAP and Registry. • SU (E_HHE and E_NH) discrepancies between SAP and Registry. • UML value and SU discrepancies between SAP and Registry. • UML Fact (Operand = EV_UMSETTL) discrepancies between SAP and Registry. • Status discrepancies (Active/Inactive) between SAP and Registry. • Status discrepancies between SU and registry. • Network/NSP/Loss Code discrepancies between SAP and registry. • Duplicate Registry Events in SAP. <p>Contact will be looking to complete a one-off exercise to correct the already identified backlog of existing exceptions.</p> <p>Contact's teams will be proactively running the EMT regularly to identify and resolve exceptions in a timely manner.</p>	<p><u>CTCT</u></p> <p>Ongoing</p>	<p>Identified</p>
<p><u>CTCS</u></p> <p>One HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39</p> <p>The Simply Energy Operations Team worked with both the MEP and previous trader when ICP 0000545550NRC39 switched in but were not able to confirm till a later date whether the metering details uploaded to the Registry were accurate. This</p>	<p><u>CTCS</u></p> <p>N/A</p>	

<p>was why no estimation was provided in the initial Reconciliation. This issue was not resolved until Revision 3. Simply's normal process when there is missing TOU data at first submission is to estimate based on RFP information however the team were not confident loading estimated data into the metering configuration as received from the Registry given there was concern that this was inaccurate.</p> <p>Incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe. Issues identified during the audit are being reviewed and added into this process for correction.</p> <p>Invalid generation of forward estimate where MADRAS cannot find shape values or the ICP is supplied for one day</p> <p>A new monthly check has been implemented to find ICPs supplied for only one day (which is very rare for Simply Energy) and manually process a correction through MADRAS for these. The first run of this check will identify and correct all issues going back 14 months.</p> <p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>A ticket has been raised to Axos to resolve the replacement of part actual interval data. Once this change has been released, we will assess how far back data can be re-loaded to address any historical issues.</p> <p>Incorrect calculation of historic estimate due to missing readings in MADRAS for ICP 0000011643EA7E3 (April 2023) because some readings were not sent to MADRAS due to timing</p> <p>Issue was identified in January 2024 and affected the April and May 2023 consumption months where the R7 submissions had already been completed in October and November 2023 accordingly. The missing reads were sent to MADRAS for ICP 0000011643EA7E3 in March 2024 which is in time for the R14 wash ups scheduled for submission in June and July 2024.</p>	<p>15 Mar 2024</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	
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Preventative actions taken to ensure no further issues will occur	Completion date
<p><u>CTCT</u></p> <p>Please find below a list of new and pre-existing exception reports to be created or migrated into the reporting tool (Retail_Q3FY24_BRP_Epic-Featues):</p> <ul style="list-style-type: none"> • Rollover and Incorrect removal meter reads. • Device registers code and Time of Use type profile discrepancies. • Default settlement units. • Correct application of Permanent Estimate (PE) readings in SAP; eliminating Forward Estimates (FE) in final washups. • Identifying new Actual (01) readings processed in SAP which don't correctly create HE readings in CONSREC. • Incorrectly applied Manual Settlement Units in SAP preventing correct application of New Settlement Units. • Identification of Gaps in Settlement Units in SAP. • Missing Shape Profiles in SAP Submission data (forced RPS). • Implement Reconciliation Manager Return File GR090 HHR ICP Missing reporting. • I Flow on Registry - No I Device in Installed in SAP. • AMI Non-Communicating ICP's (AMI Y= N) and HHR profile/submission type. • Backdated ICP Status Changes to ACTIVE on Registry (Registry AC020 audit compliance report). • Additional Registry Analyst exceptions (17 exception types). 	<p><u>CTCT</u></p> <p>30/6/2024</p>
<p><u>CTCS</u></p> <p>One HHR estimate was not generated because DataHub held insufficient history, and the manual estimation process was not used for ICP 0000545550NRC39</p> <p>Simply believes this issue was a one-off as normal process would have provided an estimate for the interim reconciliation on all TOU ICPs.</p>	<p><u>CTCS</u></p> <p>N/A</p>

<p>incomplete corrections for backdated status and trader updates where part of the affected period had already had final submissions</p> <p>A new process has been implemented to detect any changes to ICPs that may have caused volume submissions to be incorrect outside of the 14-month wash up timeframe.</p>	Ongoing	
<p>Invalid generation of forward estimate where MADRAS cannot find shape values or the ICP is supplied for one day</p> <p>A new monthly check has been implemented to find ICPs supplied for only one day (which is very rare for Simply Energy) and manually process a correction through MADRAS for these.</p>	Ongoing	
<p>Replacement of actual interval data with estimates when part day HHR data is received</p> <p>A ticket has been raised to Axos to resolve the replacement of part actual interval data.</p>	TBD	
<p>Incorrect labelling of historic estimate where seasonal adjusted shape values (SASV) published by the reconciliation manager are not available for part or all of a read-to-read period, or the seasonal shape values provided for the read-to-read period are all zero values</p> <p>Development work is pending from EMS to resolve the incorrect labelling of Historic Estimates.</p>	30 Jun 2024	

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.

CTCS

Some historic estimate volume 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, or the seasonal shape values provided for the read-to-read period are all zero values, in which case MADRAS treats zero values as nulls.

The reconciliation manager only provides shape values for NSP-network-profile combinations that a trader has had active ICPs on for each day. Where ICP data changes (such as where an embedded network changes ownership), MADRAS looks for shape values for the original NSP-network-profile combination for the day after the ICP has moved, although they are not needed for the calculation. Because MADRAS cannot find shape values for all days, it will treat the consumption as forward estimate. The issue is isolated and only occurs where all ICPs with that combination of attributes are moved on the same day. EMS is working on a solution.

MADRAS can only manage one reading per day, so where an ICP is supplied for one day, forward estimate of 42 kWh is reported. Non-compliance is reported in **sections 12.10** and **12.7** in relation to this issue. ICP 0000030255WECCB switched in on 1 February 2023 with a reading of 732839,A and out on 2 February 2023 with a reading of 733352,E. 513 kWh of historic estimate was expected to be reported in the AV080, but 42 kWh of forward estimate was reported.

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

Audit outcome

Non-compliant

Non-compliance	Description
<p>Audit Ref: 12.10</p> <p>With: Clause 3 Schedule 15.3</p> <p>From: 01-Apr-23</p> <p>To: 28-Feb-24</p>	<p>CTCS</p> <p>Where SASV profiles are not available, consumption based on validated readings is not seasonally adjusted and is labelled as forward estimate.</p> <p>Where an ICP is supplied for one day, historic estimate is not calculated, and forward estimate is reported.</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		
<p>Low</p>	<p>The controls are recorded as strong because historic and forward estimate is correctly calculated and identified most of the time.</p> <p>The audit risk rating is low as there is minor impact on settlement. Submission volumes may be incorrect where:</p> <ul style="list-style-type: none"> • the volume calculation is correct but is not seasonally adjusted between consumption months, or • an ICP is supplied for one day. 		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCS</u></p> <p>The HE volume for ICP 0000030255WECCB has now been corrected for February 2023. A new monthly check has been implemented to find ICPs supplied for only one day (which is very rare for Simply Energy) and manually process a correction through MADRAS for these. The first run of this check will identify and correct all issues going back 14 months.</p>		<p><u>CTCS</u></p> <p>Ongoing</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCS</u></p> <p>A new monthly check has been implemented to find ICPs supplied for only one day (which is very rare for Simply Energy) and manually process a correction through MADRAS for these.</p>		<p><u>CTCS</u></p> <p>Ongoing</p>	

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

Code reference

Clauses 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 was 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 reconciliation manager's 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
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
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

Test	Scenario	Test expectation	Result
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 – 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.	Has not occurred
o	ICP has a meter with a multiplier greater than 1	The multiplier is applied correctly	Compliant

AV080 NHH volumes are generated for any day where the ICP is active. Consumption is calculated as:

$$\frac{\text{Validated read-to-read period kWh}}{\text{Sum of SASV for the read-to-read period}} \times \frac{\text{Sum of SASV for active days in the reconciliation period during the read-to-read period}}$$

This will correctly apportion consumption provided that:

- there is an actual or permanent estimate reading the day before the ICP becomes “inactive”,
- there is an actual or permanent estimate reading the day the ICP becomes “active”, or
- there is no consumption between the disconnection read and reconnection read (i.e., the “inactive” period).

I found that disconnection and reconnection readings entered into ORB and SAP were provided on returned paperwork. Readings are entered on the work completion date, apart from meter removal disconnection readings which are entered with the day before the work completion date so that the replacement meter (if any) can be loaded against the work completion date. Disconnections without meter removals have their disconnection reading entered on the day of disconnection, which is also the day that the status becomes “inactive”. This will result in some consumption being apportioned to the “inactive” day and not being reported.

I found two instances where consumption was apportioned to an “inactive” period and not reported:

- **scenario a:** the ICP was disconnected on 13 September 2023 with an actual reading on 8 September 2023 of 26820 and a disconnection reading of 26846 on 13 September 2023; 20.66 kWh of the 26 kWh in the read-to-read period was reported for the “active” days within the period, and 5.34 kWh was omitted because it was recorded against an “inactive” day, and.
- **scenario b:** the ICP had readings indicating that 384 kWh was consumed between 13 September 2023 and 26 September 2023 but the ICP was disconnected from 20 September 2023 until 21 September 2023, and a disconnection reading of 179 was entered on 20 September 2023 then a reconnection reading of 229 was entered on 22 September 2023; 325.64 kWh of the 384 kWh in the read-to-read period was reported for the “active” days within the period, and 58.36 kWh was omitted because it was recorded against an “inactive” day.

CTCS

Historic estimate is prepared by EMS using the MADRAS system, using validated actual and permanent estimate readings transferred from DataHub. The check of calculations included confirming that readings and shape files were applied correctly.

The process for managing shape files was examined. CTCS downloads seasonal adjusted shape values (SASV) from the reconciliation Manager portal after each allocation and provides them to EMS via SFTP. EMS collects the files and loads them into MADRAS.

The historic estimate calculations were found to be compliant where they had occurred, but the volumes produced can be inaccurate if there are inaccurate inputs into the process, such as incorrect readings, or calculation of unmetered load readings. For scenario k (0000011643EA7E3 - April 2023), the unmetered load calculation was correct but the load for the metered register was incorrect because the meter was not created in MADRAS when the first validated readings were sent from DataHub using the “PushActual” process. The readings were not resent because the DataHub process only sends readings entered, invalidated or deleted since its “PushActual” process was run. CTCS will change the process to ensure that opening and subsequent meter readings are sent to MADRAS where there is a delay in creating the meter. The change is currently being tested, and once complete revised submission data will be washed up.

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

Test	Scenario	Test expectation	CTCS 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 – the customer reads were not transferred to MADRAS and 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 – the customer photo reads were not transferred to MADRAS and were ignored
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.

Forward estimate is monitored as part of the pre-submission checks, and any anomalies are investigated.

CTCT

Count of balancing areas differences over 15%.

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Jan-22	12	17	28	27	-	-	2	2	284
Feb-22	23	31	33	35	1	2	1	1	283
Mar-22	11	18	7	22	-	-	1	1	284
Apr-22	9	21	23	24	-	-	-	-	285
May-22	9	22	23	26	-	-	-	-	286
Jun-22	12	23	26	27	-	-	-	-	288
Jul-22	13	19	23	26	-	-	-	-	292
Aug-22	7	20	23	24	-	-	-	-	293
Sep-22	24	37	43		-	2	2		297
Oct-22	19	27	37		-	-	1		298
Nov-22	20	30	35		-	-	-		302

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Dec-22	5	12	16		-	-	-		303
Jan-23	9	18	23		-	-	-		303
Feb-23	18	33	36		-	-	1		303
Mar-23	11	16	19		-	-	-		303
Apr-23	9	20	22		-	-	-		303
May-23	10	18			-	-			303
Jun-23	11	16			-	-			301
Jul-23	15	29			-	-			300
Aug-23	5				-				301
Sep-23	11				-				301
Oct-23	11				-				302

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

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Jan-22	-1.80%	-2.76%	-3.12%	-3.24%	2,620,648	4,054,417	4,599,619	4,790,744
Feb-22	-0.88%	-0.96%	-0.87%	-0.87%	1,215,216	1,325,750	1,189,971	1,196,684
Mar-22	0.01%	0.28%	0.38%	0.41%	-15,103	-437,431	-592,278	-635,150
Apr-22	0.57%	0.73%	0.61%	0.66%	-905,999	-1,154,611	-962,229	-1,039,177
May-22	0.70%	0.19%	0.17%	0.17%	-1,337,956	-375,159	-336,999	-332,000
Jun-22	-0.19%	-0.63%	-0.78%	-0.78%	425,509	1,413,146	1,751,457	1,735,307
Jul-22	-0.15%	-0.62%	-0.86%	-0.72%	370,184	1,514,662	2,108,788	1,747,098
Aug-22	0.12%	0.26%	0.22%	0.36%	-272,505	-598,467	-500,962	-833,529
Sep-22	-0.59%	0.21%	0.22%		1,185,104	-426,168	-444,036	
Oct-22	0.04%	0.35%	0.35%		-79,304	-638,151	-649,141	
Nov-22	1.08%	1.51%	1.64%		-1,676,268	-2,336,320	-2,543,281	
Dec-22	0.71%	1.27%	1.28%		-1,078,124	-1,923,570	-1,928,021	

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Jan-23	-0.20%	-0.62%	-0.65%		298,001	925,241	962,084	
Feb-23	0.14%	-0.19%	0.04%		-192,510	262,673	-53,076	
Mar-23	0.43%	0.69%	1.08%		-682,976	-1,092,165	-1,704,075	
Apr-23	0.12%	-0.30%	0.04%		-192,204	480,214	-59,085	
May-23	-0.92%	-1.81%			1,796,752	3,549,045		
Jun-23	-0.58%	-0.58%			1,282,097	1,271,213		
Jul-23	-0.10%	0.30%			230,168	-711,712		
Aug-23	-0.69%				1,666,810			
Sep-23	0.95%				-1,802,334			
Oct-23	0.69%				-1,220,489			

I checked all differences over $\pm 15\%$ and $\pm 100,000$ kWh threshold for October 2022 onwards and found the differences were caused by under or overestimated forward estimate. Contact is investigating ICP 0002010105WMB2A which appeared in earlier revisions for October 2022 with consumption but was reported in revision 7 with zero, to determine whether the consumption reported was correct.

CTCS

The EMS forward standard estimate process is based on a “straight line” methodology, and where no historical information is available a “forward default” estimate of 42 kWh per day is used. The process for forward standard estimate calculation was checked and confirmed as accurate. CTCS monitors differences between revisions through its pre submission validation process.

The accuracy of the initial submission, in comparison to each subsequent revision is required to be within 15%. The table below shows the number of balancing areas where this target was met.

Count of balancing areas differences over 15%.

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Jan-22	5	21	23	27	-	-	1	1	78
Feb-22	3	14	20	24	-	-	-	-	77
Mar-22	4	12	17	21	-	-	-	-	74
Apr-22	4	9	13	15	-	-	-	-	74
May-22	6	11	11	17	-	-	-	-	76
Jun-22	1	8	11	15	-	-	-	-	75
Jul-22	2	9	9	11	-	-	-	-	80
Aug-22	5	6	7	9	-	-	-	-	86
Sep-22	5	21	25		-	-	-		118

Month	Over ±15%				Over ±15% and ±100,000 kWh				Total Balancing Areas
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14	
Oct-22	5	13	24		-	-	-		117
Nov-22	7	17	27		-	-	-		115
Dec-22	1	18	36		-	-	-		119
Jan-23	2	19	36		-	-	-		118
Feb-23	3	29	41		-	-	-		119
Mar-23	4	13	24		-	-	-		120
Apr-23	10	24	33		-	-	-		119
May-23	7	21			-	-			118
Jun-23	4	12			-	-			119
Jul-23	2	11			-	-			116
Aug-23	4				-				109
Sep-23	6				-				104
Oct-23	8				-				103

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

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Jan-22	-2.96%	-0.07%	-1.11%	0.31%	131,018	2,890	48,261	-13,380
Feb-22	0.76%	-2.18%	1.58%	2.89%	-29,735	87,461	-61,054	-110,017
Mar-22	1.30%	-0.60%	2.09%	2.77%	-56,076	26,446	-89,355	-117,503
Apr-22	-0.32%	0.95%	2.18%	2.54%	14,021	-41,056	-93,203	-108,480
May-22	-1.56%	0.07%	1.08%	1.62%	79,273	-3,392	-53,502	-79,630
Jun-22	-0.42%	0.27%	0.10%	0.69%	21,903	-14,062	-5,141	-35,097
Jul-22	-0.05%	0.27%	-0.13%	-0.09%	2,630	-14,273	6,681	4,698
Aug-22	0.33%	0.67%	0.11%	1.34%	-16,443	-33,589	-5,357	-67,039
Sep-22	1.08%	2.59%	2.58%		-51,349	-121,704	-121,057	
Oct-22	0.71%	2.85%	3.99%		-28,439	-112,037	-155,063	
Nov-22	1.44%	-0.66%	1.19%		-60,482	28,126	-49,923	
Dec-22	0.70%	0.39%	3.48%		-29,121	-16,457	-141,583	

Month	Variation				Volume impact			
	Revision 1	Revision 3	Revision 7	Revision 14	Revision 1	Revision 3	Revision 7	Revision 14
Jan-23	0.11%	0.86%	3.41%		-4,880	-36,306	-140,292	
Feb-23	0.09%	2.10%	3.53%		-3,720	-82,278	-136,627	
Mar-23	-3.02%	0.71%	3.26%		135,993	-30,617	-137,903	
Apr-23	0.27%	0.82%	1.94%		-11,486	-34,914	-81,256	
May-23	-0.55%	0.42%			25,912	-19,712		
Jun-23	-0.79%	-1.63%			38,424	80,352		
Jul-23	-0.32%	-0.65%			17,063	34,334		
Aug-23	0.24%				-13,072			
Sep-23	0.71%				-34,340			
Oct-23	0.34%				-15,245			

No differences over $\pm 15\%$ and $\pm 100,000$ kWh threshold occurred after January 2022. The January 2022 exception was checked during the previous audit and found to be caused by a correction for ICP 0000366462MP614 which was a DUML ICP which had an incorrect average daily kWh applied and required correction to capture all consumption within the 14-month submission window.

Audit outcome

Non-compliant

Non-compliance	Description			
<p>Audit Ref: 12.12</p> <p>With: Clause 6 Schedule 15.3</p> <p>From: 01-Jan-22</p> <p>To: 31-Oct-23</p>	<p>CTCT and CTCS</p> <p>Inaccurate forward estimate caused the thresholds not to be met in some instances.</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 recorded as moderate because they mitigate risk most of the time but there is room for improvement.</p> <p>The impact is low because Initial data is replaced with revised data and washed up.</p>			
Actions taken to resolve the issue		Completion date	Remedial action status	
<p><u>CTCT</u></p> <p>Primary cause is the unpredictability of rural/irrigation usage patterns.</p>	<p><u>CTCT</u></p> <p>Completed</p>	<p>Identified</p>		
<p><u>CTCS</u></p> <p>Simply Energy are unable to correct previous FE thresholds not being met.</p>	<p><u>CTCS</u></p> <p>N/A</p>			
Preventative actions taken to ensure no further issues will occur		Completion date		
<p><u>CTCT</u></p> <p>We will continue monitoring rural/irrigation ICPs. We will also look to discuss the possibility of revising the SAP estimation algorithm.</p>		<p><u>CTCT</u></p> <p>Ongoing</p>		
<p><u>CTCS</u></p> <p>A new process has been implemented within the Simply Energy Customer Care Team with the aim of ensuring that the reasonable endeavours requirements are met for any ICPs unread over 12 months - this will provide better read attainment generally and will allow the Compliance team to insert Permanent Estimates where appropriate.</p>		<p><u>CTCS</u></p> <p>Ongoing</p>		

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 14 profile changes and confirmed that 13 were changed on an actual or permanent estimate reading.

CTCS

CTCS's policy is to complete profile changes on actual or permanent estimate readings. I checked a sample of 15 profile changes and found they were completed on actual meter readings.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

No activity occurred for CTCX during the audit period.

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 three of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.

For each category one or category two 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

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.

Compliance is recorded in this section because the process to aggregate submission information is correct. If underlying data is incorrect submission accuracy issues can occur. All submission accuracy issues are recorded in **section 12.7**.

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, AV130 and AV140 and reports as part of the aggregation checks.

Audit commentary

Submission information is appropriately rounded to no more than two decimal places for CTCT and CTCS.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

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

I reviewed a sample of 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. I checked the proportion of historic estimates using the GR170 report.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jan-2022	333	372	291	379
Feb-2022	344	368	289	378
Mar-2022	360	372	286	379
Apr-2022	366	371	285	380
May-2022	364	370	286	380
Jun-2022	366	370	285	381
Jul-2022	373	376	318	385
Aug-2022	371	377	323	386
Sep-2022	376	381		390
Oct-2022	374	385		391

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Nov-2022	377	389		395
Dec-2022	378	386		396
Jan-2023	376	385		396
Feb-2023	380	389		396
Mar-2023	382	389		396
Apr-2023	379	386		397
May-2023	378			397
Jun-2023	374			395
Jul-2023	377			394

I reviewed historic estimate attainment for a sample of nine submissions. The targets were met for revision 3 and 7 but were not met for revision 14.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Jun-2022	-	-	99.8420%
Jul-2022	-	-	99.9625%
Aug-2022	-	-	99.9560%
Jan-2023	-	98.95%	-
Feb-2023	-	99.42%	-
Mar-2023	-	99.42%	-
Jun-2023	97.83%	-	-
Jul-2023	98.00%	-	-
Aug-2023	97.90%	-	-

As discussed in **section 6.8**, there are processes in place monitor read attainment, and attempt to resolve issues preventing read attainment. 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.

I checked a sample of ICPs which did not have 100% historic estimate at revision 14 and found that in most cases it was because reads were unable to be obtained and a permanent estimate had not been entered. For three ICPs forward estimate was invalidly reported, and a recommendation to investigate these is made in **section 12.8**.

I checked a sample of five NSPs where the revision 3 historic estimate attainment levels were not met and five NSPs where the revision 7 historic estimate attainment levels were not met and found the thresholds were not met because CTCT could not obtain actual meter readings.

CTCS

The quantity of historical estimates is contained in the submission file and is not a separate report. I checked the proportion of historic estimates using the GR170 report.

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Jan-2022	97	125	119	160
Feb-2022	109	128	114	154
Mar-2022	115	127	119	151
Apr-2022	119	130	129	152
May-2022	126	136	129	154
Jun-2022	120	130	122	153
Jul-2022	122	130	132	157
Aug-2022	133	131	141	162
Sep-2022	147	153		194
Oct-2022	141	156		191
Nov-2022	142	159		191
Dec-2022	143	169		195
Jan-2023	158	172		195
Feb-2023	163	174		196

Month	Revision 3 80% Met	Revision 7 90% Met	Revision 14 100% Met	Total
Mar-2023	168	180		196
Apr-2023	171	183		197
May-2023	174			197
Jun-2023	177			198
Jul-2023	175			194

I checked five NSPs with less than 80% historic estimate at revision 3, and five NSPs with less than 90% historic estimate at revision 7 and found the targets were not met because actual reads were unable to be obtained or in one case, because an ICP was supplied for one day. MADRAS can only manage one reading per day, so where an ICP is supplied for one day, forward estimate of 42 kWh is reported. Non-compliance is reported in **sections 12.10** and **12.7** in relation to this issue.

I reviewed historic estimate attainment for a sample of nine submissions. The targets were met for revision 3 and 7 but were not met for revision 14.

Month	Revision 3 80% Target	Revision 7 90% Target	Revision 14 100% Target
Jun-2022	-	-	97.5518%
Jul-2022	-	-	97.1006%
Aug-2022	-	-	98.3815%
Jan-2023	-	94.65%	-
Feb-2023	-	95.15%	-
Mar-2023	-	96.38%	-
Jun-2023	92.06%	-	-
Jul-2023	93.27%	-	-
Aug-2023	95.74%	-	-

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 13.3</p> <p>With: Clause 10 of Schedule 15.3</p> <p>From: 01-Jan-22</p> <p>To: 31-Jul-23</p>	<p>CTCT and CTCS</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: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
<p>Low</p>	<p>Overall, the controls are assessed to be moderate because compliance is achieved in most instances.</p> <p>The impact is assessed to be low as good estimation processes are in place where historic estimate cannot be obtained.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p><u>CTCT</u></p> <p>The primary cause is the unpredictability of rural/irrigation usage patterns.</p> <p><u>CTCS</u></p> <p>Simply Energy are unable to correct previous submissions.</p>		<p><u>CTCT</u></p> <p>Completed</p> <p><u>CTCS</u></p> <p>N/A</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur		Completion date	
<p><u>CTCT</u></p> <p>We will continue to monitor rural/irrigation ICPs, as well as the performance of meter reading contractors.</p> <p><u>CTCS</u></p> <p>A new process has been implemented within the Simply Energy Customer Care Team with the aim of ensuring that the reasonable endeavours requirements are met for any ICPs unread over 12 months - this will provide better read attainment generally and will allow the Compliance team to insert Permanent Estimates where appropriate.</p>		<p><u>CTCT</u></p> <p>Ongoing</p> <p><u>CTCS</u></p> <p>Ongoing</p>	

14. GLOSSARY

CS breach for transfer switch	CS arrival date is more than three business days after receipt of the NT where the CS arrives immediately after the NT.
E2 breach for transfer switch	CS Actual Transfer Date is more than ten business days after receipt of the NT.
ET breach for switch move	AN Expected Transfer Date is earlier than the NT Proposed Transfer Date; OR AN Expected Transfer Date is more than ten business days after NT arrival date.
NA breach	NW arrival date is more than two calendar months after the CS Actual Transfer Date.
PT breach	NT Proposed Transfer Date is more than 90 days before the NT arrival.
RR breach	RR arrival date is more than four calendar months from the CS Actual Transfer Date.
SR breach	NW arrival date is more than ten business days after the initial NW for the same trader requesting the withdrawal. The trader sending the corresponding AW (either accepting or rejecting the withdrawal) only receives a breach on the AW if it is sent more than five days after the latest NW as in the original rule.

CONCLUSION

The audit found 42 non-compliance issues (the same as the previous audit) and 11 recommendations are made. The audit risk rating has decreased from 106 in the previous audit to 99.

For CTCT across most areas I found that improvements had been made, especially to processes for validation and identification of issues. Because investigation and correction of these identified issues has not consistently occurred as soon as practicable, and reporting provided by CTCT indicated that these outstanding corrections are likely to have a high impact on submission volumes, there has not been a decrease in the total audit risk rating. Once the backlog of ICPs requiring investigation and correction is cleared, I expect that the audit risk rating will start to decrease because having fewer outstanding corrections will reduce the impact ratings.

CTCS supplies a much smaller number of ICPs than CTCT and has less activity. Compliance for CTCS has improved during the audit period, and they are aware of and working to find solutions for the issues identified.

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 recommends that the next audit be completed in three months. I have considered this in conjunction with Contact's responses which indicate that they plan to take action to prevent future non-compliance, and recommend that the next audit is undertaken in a minimum of ten months on 30 January 2025. This recommendation is consistent with the previous audit's relationship between the audit risk rating and audit period, and recognises that improvements have been made and many more are in progress, as well as that the Christmas-New Year break falls late within the audit period. This will ensure appropriate audit oversight within a reasonable period of time.

PARTICIPANT RESPONSE

Contact have reviewed this report and their comments are contained within its body.

15. APPENDIX

15.1. Inactive consumption

Inactive consumption ICPs requiring further correction identified during this audit:

ICP	Code	Inactive kWh	Disconnection date	Reconnection date	Issue
0000543303NRB37	CTCT	2864	9 August 2023	25 September 2023	Incorrect settlement units
0000573995NRE79	CTCT	1703	26 September 2023	28 September 2023	Incorrect settlement units
1000022196BP9DE	CTCT	57	9 August 2023	25 September 2023	No inactive consumption, readings need to be updated to reflect actual usage
1001293707LC130	CTCT	7247	19 February 2023	13 July 2023	Incorrect settlement units
0400445034LC75B	CTCT	7170	17 December 2022	17 December 2022	Incorrect settlement units
0001524992WE0EB	CTCT	6499	24 May 2023	1 December 2023	Incorrect settlement units
1001990280TC9F6	CTCT	6301	1 January 2023		Incorrect settlement units

Inactive consumption ICPs requiring further correction identified the previous audit:

ICP	Code	Disconnection Date	Latest read date	Consumption after Disconnection
0007118113RN739	CTCT	29 November 2022	31 January 2023	5082.7
0006673201RN018	CTCT	5 October 2022	31 January 2023	19.00
0000201349TPAA0	CTCT	29 November 2022	31 January 2023	157.35
0000037162NT353	CTCT	5 December 2022	9 December 2022	2,862.70
0008572520CN315	CTCT	28 November 2022	4 December 2022	2,725.28
0000551909WEAF8	CTCT	17 October 2022	5 January 2023	2,508.43
0440890047LCD55	CTCT	27 October 2022	21 January 2023	2,480.00
0000247330TPFF9	CTCT	5 December 2022	21 January 2023	2,351.93
0000033220WE639	CTCT	31 October 2022	18 January 2023	2,325.42
0117876038LC4AD	CTCT	19 January 2023	28 January 2023	2,245.00
0155489356LC2A9	CTCT	13 September 2022	17 October 2022	2,036.00
0140697837LCC32	CTCT	28 November 2022	3 December 2022	1,832.00
0143268031LC338	CTCT	22 November 2022	11 January 2023	1,503.00
0000001576EN6D0	CTCT	27 September 2022	29 September 2022	1,401.73
0000045164DE7A2	CTCT	7 November 2022	18 December 2022	1,373.00
0000638620UN8FE	CTCT	1 November 2022	8 January 2023	1,353.97
1001102320LC77E	CTCT	16 January 2023	26 January 2023	1,186.00
0000440489UNBD6	CTCT	6 September 2022	28 November 2022	1,096.00
0000232324UNB0E	CTCT	5 December 2022	23 January 2023	1,052.00
0001445220UNA07	CTCT	28 November 2022	5 December 2022	1,037.00
0462999386LC554	CTCT	13 October 2022	10 November 2022	1,028.00
0000128395UNFEC	CTCT	31 August 2022	22 November 2022	1,011.00
1001154626LC540	CTCT	9 December 2020	31 January 2023	916.92
1002076489LCDAC	CTCT	12 December 2022	27 January 2023	868.00
1099582455CN3B5	CTCT	14 November 2022	31 January 2023	818.52
1001104371LC6F3	CTCT	26 October 2022	24 November 2022	813.00
0278411191LCAE2	CTCT	14 November 2022	22 November 2022	781.00

ICP	Code	Disconnection Date	Latest read date	Consumption after Disconnection
0195930703LC99F	CTCT	30 August 2022	29 January 2023	772.00
0174891539LC001	CTCT	10 October 2022	21 November 2022	765.00
0000101943UNC46	CTCT	14 October 2022	7 January 2023	715.00
0005673017WA081	CTCT	18 January 2023	30 January 2023	694.08
0022256790LC21F	CTCT	4 August 2022	19 January 2023	670.00
0007019165RN627	CTCT	1 June 2022	2 August 2022	636.12
1002153298UNDD7	CTCT	16 January 2023	31 January 2023	459.62
1001295100LCF3C	CTCT	9 August 2022	29 January 2023	420.07
0000101151DE46C	CTCT	12 October 2022	23 December 2022	385.00
0338746706LC555	CTCT	19 January 2023	31 January 2023	383.00
0104214694LC25B	CTCT	22 August 2022	15 October 2022	369.00
1000563893PCE8E	CTCT	15 August 2022	16 September 2022	277.69
0001256805UNB71	CTCT	26 October 2022	19 December 2022	265.00
0242465196LC428	CTCT	1 August 2022	20 August 2022	235.28
0000150935UNA40	CTCT	22 November 2022	19 December 2022	215.00
1001261940LCE88	CTCT	1 August 2022	18 August 2022	214.00
0207692440LCABA	CTCT	8 August 2022	30 September 2022	202.00
0290154383LCD10	CTCT	11 August 2022	14 August 2022	159.00
1002055954LC190	CTCT	19 August 2022	18 December 2022	153.00
0166787000LC00F	CTCT	27 September 2022	19 December 2022	133.00
0000162716TPD7B	CTCT	1 August 2022	18 August 2022	122.07
1002044474LC08C	CTCT	23 August 2022	27 September 2022	107.00
0000244654UN42F	CTCT	15 November 2022	21 January 2023	48.00
0986876832LCEF6	CTCT	8 March 2022	31 January 2023	46.38
0008572221CN052	CTCT	14 July 2022	22 November 2022	33.32
0006553265RNB9B	CTCT	16 January 2023	31 January 2023	27.70
0000128454TP98D	CTCT	9 August 2022	24 January 2023	26.82
0122785029LC88C	CTCT	15 July 2022	11 September 2022	26.00
0005404614RN631	CTCT	28 February 2022	31 January 2023	25.50
0006452434RNC1C	CTCT	15 December 2021	30 January 2023	23.40
0176566155LCAC2	CTCT	20 July 2022	20 November 2022	19.00
0007182622RNA02	CTCT	4 August 2022	31 January 2023	18.65
0005477964RN43A	CTCT	16 June 2022	31 January 2023	17.60
0179560824LC3E5	CTCT	7 July 2022	23 October 2022	17.00
0002193670CN5D8	CTCT	9 February 2021	12 October 2022	16.84
0001190317ML7E4	CTCT	14 June 2022	15 November 2022	14.24
1002071248LC460	CTCT	13 July 2022	5 January 2023	10.19
0007167262RNEFB	CTCT	31 July 2018	21 January 2023	6.10
0000106397UNE64	CTCT	5 July 2022	6 July 2022	5.10

15.2. Bridged consumption

Unbridged ICPs requiring further correction identified during this audit:

ICP	Code	Date Bridged	Date Unbridged	Days Bridged
0006662653ALB8A	CTCT	7 April 2023	26 September 2023	172
0000225220UNF81	CTCT	10 October 2023	3 November 2023	24
0186666004LCAD9	CTCT	19 October 2023	31 October 2023	12
0000106615UNEAE	CTCT	10 July 2023	27 July 2023	17
1001280262LCC8B	CTCT	23 June 2023	27 June 2023	4
1000515564PC922	CTCT	28 September 2023	4 December 2023	67
0005320577RNC44	CTCT	15 May 2023	12 July 2023	58
0007214693RNA45	CTCT	29 September 2023	20 October 2023	21
0010405020ELFF7	CTCT	17 November 2023	6 December 2023	19
0354500309LC800	CTCT	14 April 2023	3 May 2023	19
0000183692CT295	CTCT	6 October 2023	24 October 2023	18
0006503233RN168	CTCT	13 June 2023	3 July 2023	20

15.3. Incorrect new connection active status dates

New ICPs with incorrect active status dates which remain incorrect found during this audit, which remain incorrect:

ICP	Code	Recorded Status Event Date	Correct Status Event Date	Exception type
0007214719RN49A	CTCT	21 April 2023	20 April 2023	IECD ≠ active date and unmetered
0000515434DE408	CTCT	12 September 2023	8 September 2023	IECD ≠ active date and unmetered

New ICPs with incorrect active status dates which remain incorrect found during the previous audit which remain incorrect:

ICP	Code	Recorded Status Event Date	Correct Status Event Date	Comment
0110013367ELD15	CTCT	16 November 2022	17 November 2022	Corrected in registry awaiting SAP update.
0000540328WT809	CTCT	15 August 2022	12 August 2022	Corrected in SAP awaiting registry correction.
1100000278WM1E3	CTCT	6 September 2022	5 September 2022	
0007211289RN958	CTCT	16 September 2022	15 September 2022	
0007209556RN127	CTCT	13 August 2022	12 August 2022	
0007205438RNFC8	CTCT	13 December 2021	8 December 2021	
0007205215RNBC0	CTCT	13 December 2021	8 December 2021	
0000574620NRAEB	CTCT	30 September 2022	29 September 2022	Not corrected, cannot claim for an earlier date than the meter installation date.
1002161054LCB59	CTCT	22 July 2022	13 July 2022	
1100000173WMC34	CTCT	12 July 2022	11 July 2022	Not corrected, would require a switch withdrawal.
0007212818RN210	CTCT	8 December 2022	7 December 2022	
0000513860CEADD	CTCT	6 July 2022	5 July /2022	Still working on correction, which is complicated by metering updates.
0000416097WT4BE	CTCT	11 July 2022	18 July 2022	Under investigation to confirm correct date.