

**ELECTRICITY INDUSTRY PARTICIPATION CODE
RECONCILIATION PARTICIPANT AUDIT REPORT**

For

TENSOR NZ LIMITED (TTTL)
(COMPANY #6429932)

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EXECUTIVE SUMMARY

This reconciliation participant audit was performed at the request of Tensor NZ Limited (TTTL) to support their application for certification, in accordance with clauses 2A of Schedule 15.1 of The Code 2010. The relevant clauses audited are as required by the Guidelines for Reconciliation Participants Audits V 7.2 issued by the Electricity Authority.

At the time of this audit Tensor NZ was trading 4 ICPs (residential). Initial trading has been in the capacity of retailer with a focus on both residential and small business (category 1 metering) in the Auckland area, mainly the Vector network. The company is not planning to actively look for new customers.

Momentous Consulting conducted the desktop audit on 11/01/2021. Momentous has been assisting Tensor NZ to ensure they have all the required processes in place and discussed industry trading as a reconciliation participant. Momentous has not been involved in the creation or construction of processes or systems. A bespoke system is to be used for registry updates, reconciliation and billing.

The overall compliance level is very good. We noted one non-compliance which has been cleared. The company provided the process documentation which is of a very high quality and covers aspects that are needed to meet compliance. The company has a good understanding of the Market.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. Table 1 of the Guidelines for Reconciliation Participant audit provides some guidance on this matter. The Future Risk Rating score is 1 which results in an indicative audit frequency of 24 months. Our recommendation is 18 months as this is a new entrant.

The audit period is 10/02/2021 to 6/11/2021

We thank Tensor NZ staff for their full and complete cooperation in this audit.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Electricity supplied information provision to the reconciliation manager	11.3	15.7	Billed volumes are not aggregated by invoice month	Strong	Low	1	Cleared
HHR aggregates information provision to the reconciliation manager	11.4	15.8	HHRAGGR files do not contain electricity supplied information	Strong	Low	1	Not required. The Code change required a line up with RN file specification. Breach risk rating excluded from total
Future Risk Rating						1	
Next audit						24 months	

Future risk rating	0-1	1-3	4-15	16-40	41-55	56+
Indicative audit frequency	36 months	24 months	18 months	12months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Description	Recommendation
Accuracy of submissions	12.7	TTTL does not provide revision files; there is a process of monitoring if no more accurate information is obtained	Consider submitting all revisions to RM regardless of whether more accurate information is obtained or not.

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

TTTL does not have any exemptions granted to exempt them from compliance with all or any of the clauses.

Audit commentary

TTTL did not apply for any exemptions. We checked the Electricity Authority website and confirmed that there are no exemptions in place.

1.2. Structure of Organisation

The company is a registered company with Marcus Sin as the sole Director and operator.

1.3. Persons involved in this audit

Name	Title	Company
Marcus Sin	Managing Director	Tensor NZ Limited
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates

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

TTTL does not use any agents to fulfil their obligations to obtain certification.

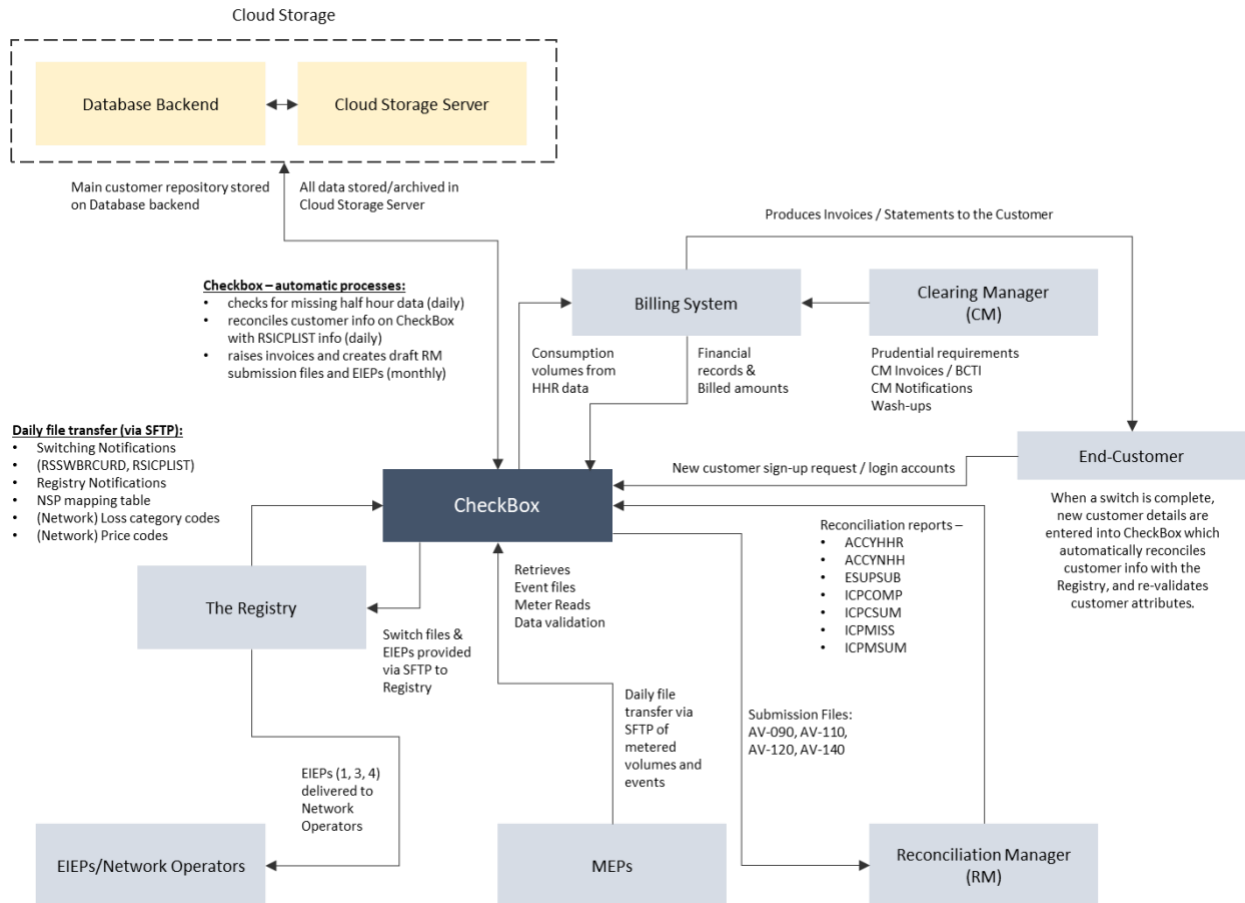
Audit commentary

TTTL does not use any agents. All functions are performed by TTTL's staff. Meter readings are received from MEPs. If there is ever a need for manual reads, it is the intention that TTTL will enter into arrangements with Wells.

1.5. Hardware and Software

TTL is using their own bespoke system. CHECKBOX is a bespoke system for processing metering files, interacting with the registry and switching, and processing of reconciliation submission files and EIEP files with network operators. The system also provides data validation against the registry.

CHECKBOX is developed with a PostgreSQL database backend. This interacts with the cloud storage server through a user interface built with Python. Xero is used for billing.



1.6. Breaches or Breach Allegations

There were no breaches lodged against TTL in the period covered by this audit.

1.7. ICP Data

Metering Category	(6/11/2021)	(date)	(date)
1	4		
2	0		
3	0		
4	0		
5	0		
9	0		

Status	Number of ICPs (06/11/2021)	Number of ICPs (date)	Number of ICPs (date)
Active (2,0)	4		
Inactive – new connection in progress (1,12)	0		
Inactive – electrically disconnected vacant property (1,4)	0		
Inactive – electrically disconnected remotely by AMI meter (1,7)	0		
Inactive – electrically disconnected at pole fuse (1,8)	0		
Inactive – electrically disconnected due to meter disconnected (1,9)	0		
Inactive – electrically disconnected at meter box fuse (1,10)	0		
Inactive – electrically disconnected at meter box switch (1,11)	0		
Inactive – electrically disconnected ready for decommissioning (1,6)	0		
Inactive – reconciled elsewhere (1,5)	0		
Decommissioned (3)	0		

1.8. Authorisation Received

No authorisation letter was required.

1.9. Scope of Audit

This reconciliation participant audit was performed at the request of Tensor NZ. Clause 2A of Schedule 15.1 puts the obligation on the reconciliation participant to obtain Authority approval before performing a function listed in clause 15.38(1) without certification. The audit was carried out on 19 November 2021 via MS Teams.

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

Tasks Requiring Certification Under Clause 15.38(1) of Part 15	Relevant to audit	Agents Involved in Performance of Tasks
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(a) - Maintaining registry information and performing customer and embedded generator switching	✓	
(b) – Gathering and storing raw meter data	✓	
(c)(i) - Creation and management of HHR volume information	✓	
(d)(i) – Calculation and delivery of ICP days under clause 15.6	✓	
(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	✓	

1.10. Summary of previous audit

There is no history of a previous audit for this participant.

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 10.6, 11.2, 15.2

Code related audit information

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

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

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

Audit observation

The process used by TTTL to assure that compliance with clause 11.2 and 15.2 are met was discussed during the audit.

Audit commentary

TTTL is aware of the requirements to ensure that the registry is populated, maintained and notifications from the registry are actioned accordingly. Process documentation covers all areas of registry functions.

TTTL validates their customers information against the LIS file on a daily basis. This is an automated system in CHECKBOX that identifies any discrepancies in their customer data with what is currently in the registry. If any discrepancies are identified, an email notification is sent advising them of the discrepancy and an investigation is conducted. Any changes to TTTL customers' information are recorded in an audit trail of customer information in the databases.

On the first business day of each month information is checked against stored data and any errors found will be addressed immediately and recorded in the audit log.

Audit outcome

Compliant

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

We reviewed the process for file submission performed by TTTL. Alleged breaches during the audit period were reviewed.

Audit commentary

Processes for providing information were reviewed and observed throughout the audit. No alleged breaches during the audit period were recorded.

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

Section 1.5 shows three diagrams of the information flow for TTTL. To assess compliance with this clause we examined the process of receiving data from MEPs. Data transmission was discussed during the audit.

Audit commentary

The company receives data from MEPs via SFTP. Half hour meter reads will be retrieved on a daily basis at 6am to 7am and validated as required by the Code. Data is stored in CHECKBOX. It is a fully automated process.

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

TTTL sends and receives data to and from the registry. It is an automated process. Each upload is recorded by the software. Reconciliation files are uploaded via SFTP through CHECKBOX, which records date, time and a participant's login details. Metering data provided by MEPs is automatically uploaded by CHECKBOX. Once the data is uploaded it is moved to an archive directory.

TTTL communicates with other participants via email e.g., notification of sending RR file. Emails are archived.

Audit commentary

CHECKBOX has a built-in functionality to record a complete audit trail for all data gathering, validation, and processing data. TTTL provided 3 examples of metering files stored in CHECKBOX; the name of the source file is recorded against each interval. We confirm that data is correctly uploaded to CHECKBOX.

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

We reviewed TTTL current customer terms and conditions.

Audit commentary

TTTL published their Terms and Conditions on their website. The document states that the agreement applies from the agreed date and to the date a customer applies to switch to another electricity supplier. The agreement covers any other participants such as MEPs or a distributor. The agreement was reviewed by the Authority and no changes were recommended.

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

We reviewed TTTL current customer terms and conditions.

Audit commentary

TTTL terms and conditions include consent to access for authorised parties for the duration of the contract. TTTL will give at least 10 BD notice if they or their representative or the network company need to construct, upgrade, repair, or maintain any equipment. A notice will be provided in writing, text message or email.

Audit outcome

Compliant

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

Code reference

Clause 10.35(1)&(2)

Code related audit information

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

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

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

Audit observation

We reviewed TTTL current customer terms and conditions.

Audit commentary

Compliance confirmed based on the characteristics of the installations traded by TTTL. At the time of the audit, TTTL was trading 4 ICPs of category 1 metering installations. All metering installations are located at a point of connection.

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

We reviewed TTTL current customer terms and conditions.

Audit commentary

The section titled “Transfer of this Agreement” of the Terms and Conditions covers a situation where TTTL commit a relevant event of default as defined under the Code. Compliance confirmed based on a review of the Terms and Conditions.

Audit outcome

Compliant

2.9. Connection of an ICP (Clause 10.32)

Code reference

Clause 10.32

Code related audit information

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

- *accept responsibility for their obligations in Parts 10, 11 and 15 for the point of connection; and*
- *have an arrangement with an MEP to provide 1 or more metering installations for the point of connection.*

Audit observation

We reviewed the EDA file for the audit period to identify all new connections and confirm process controls and compliance. We reviewed and discussed the reconnection process with TTTL staff. There were no reconnections during the audit period.

Audit commentary

TTTL does not accept new connections and they have no intention of conducting any in the immediate future. Only established installations are traded. The new connection process is not documented, but it will be developed prior to TTTL processing any new connections.

If any ICP needs to be reconnected TTTL will follow processes setup by MEPs (MTRX and NGCM). They will update the registry with the reconnected status once the MEP has confirmed the reconnection.

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 trader 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:*
 - 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 2 business days of electrical connection*
 - o *if the ICP has metered load, 1 or more certified metering installations are in place*
 - o *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the temporary electrical connection.*

Audit observation

We reviewed the EDA file for the audit period to identify all new connections and confirm process controls and compliance.

Audit commentary

TTTL have no intention of conducting any new connections in the immediate future. This clause is not applicable.

Audit outcome

Not applicable

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

Code reference

Clause 10.33A(1)

Code related audit information

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

- *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 2 business days of electrical connection*
 - o *if the ICP has metered load, 1 or more certified metering installations are in place*
 - o *if the ICP has not previously been electrically connected, the relevant distributor has given written approval of the electrical connection.*

Audit observation

The new connection and reconnection processes were discussed. The new connection process is not documented, but it will be developed prior to TTTL processing any new connections.

The Audit Compliance report for the audit period was examined to identify any uncertified metering installations.

Audit commentary

The review of the Audit Compliance report confirmed that the company does not trade uncertified metering installations. The reconnection process was reviewed and we found it compliant.

The PR-220 report (Uncertified Metering Installations) which checks for any uncertified metering installations, is automatically run on the 7th, 14th and 21st day of each month at 0600 and delivered to each participant. CHECKBOX automatically receives this file and archives accordingly. If any ICP identifiers are included in the report, a notification will be raised.

Audit outcome

Compliant

2.12. Arrangements for line function services (Clause 11.16)

Code reference

Clause 11.16

Code related audit information

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

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

Audit observation

The LIS file was reviewed to identify all networks TTTL has traded on during the audit period.

Audit commentary

All trading is on the Vector network and the agreement for trading on this network is in place and was sighted as part of this audit. TTTL have advised that they do not intend to trade outside the Auckland area in the immediate future, but when they do, they will organise arrangements with the relative network company in advance.

Audit outcome

Compliant

2.13. Arrangements for metering equipment provision (Clause 10.36)

Code reference

Clause 10.36

Code related audit information

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

Audit observation

The LIS file was reviewed to identify the MEPs for TTTL ICPs during the audit period.

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

Audit commentary

TTTL first ensure they have an existing agreement with the MEP, and that the metering installations are certified as compliant, before they switch the ICP.

TTTL have arrangements in place with Intellihub/Metrix and AMS. These agreements were sighted and are all current. The process to accept a customer includes that the metering must be with an MEP that TTTL have an agreement with. There is no intention to enter into agreements with other MEPs at this stage.

MEP nominations will only occur for existing connections (who are with a MEP who they have no agreement with) that have an AMI-capable meter in place.

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

This was discussed during the audit. This clause came in to force on 01/02/2021

Audit commentary

TTTL is aware of their obligation and will meet their obligation.

We reviewed the EDA file and confirmed that such a situation did not occur.

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

This was discussed during the audit. This clause came in to force on 01/02/2021

Audit commentary

TTTL is aware of their obligation and will meet their obligation.

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 unbridged a load control switch – if the load control switch does not control a time 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 personnel 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

This was discussed during the audit. This clause came in to force on 01/02/2021

Audit commentary

TTL will not be removing or breaking seals. Only MEPs and VECT are authorised to remove or break seals.

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 1 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

This was discussed during the audit. This clause came in to force on 01/02/2021

Audit commentary

TTL will not be bridging meters. Only VECT or MEPs are authorised to bridge meters.

Audit outcome

Compliant

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

This was discussed during the audit. We asked TTTL to provide an invoice for verification.

Audit commentary

TTTL provided an invoice. We confirm that the ICP identifier is recorded on the invoice.

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

This was discussed during the audit. We reviewed TTTL website and correspondence with customers.

Audit commentary

We confirm that the company website contains the link to Utilities Dispute. It is also quoted during communication with the customer.

Consumer Support

If you have a question, concern or complaint, please let us know straight away. We'll work with you to resolve things quickly and fairly. You can also contact Utilities Disputes at any time for a free and independent resolution service on 0800 223 340 or at utilitiesdisputes.co.nz
For a free and independent price comparison, visit powerswitch.org.nz

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

This was discussed during the audit. We reviewed TTTLs website and correspondence with customers.

Audit commentary

We confirm that the company website contains the link to Power Switch. It is also quoted during communication with the customer. The screenshot below shows an email footer.

Consumer Support

If you have a question, concern or complaint, please let us know straight away. We'll work with you to resolve things quickly and fairly. You can also contact Utilities Disputes at any time for a free and independent resolution service on 0800 223 340 or at utilitiesdisputes.co.nz

For a free and independent price comparison, visit powerswitch.org.nz

Audit outcome

Compliant

3. MAINTAINING REGISTRY INFORMATION

3.1. Obtaining ICP identifiers (Clause 11.3)

Code reference

Clause 11.3

Code related audit information

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

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

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

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

Audit observation

The EDA file for the audit period was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

TTTL did not undertake any new connections during the audit period and is not intending on processing new connections in the immediate future.

The new connection process is not documented.

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 EDA file for the audit period was reviewed to identify all new connections and confirm process controls and compliance.

Audit commentary

TTTL processes are designed to ensure that trader information is populated as required by this clause. No late registry updates were observed.

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

We examined the LIS and EDA files and the Audit Compliance report for the period covered by this audit. The process for updating the registry is documented.

Audit commentary

The analysis of the EDA file showed that there were no changes to the registry information. The only files posted to the registry were NT and Trader files. TTTL will use the browser interface or the SFTP file transfer to make any changes to the registry.

Audit outcome

Compliant

3.4. Trader responsibility for an ICP (Clause 11.18)

Code reference

Clause 11.18

Code related audit information

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

A trader ceases to be responsible for an ICP if:

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

- *advise the MEP responsible for the metering installation of the decommissioning (clause 11.18(3)(b)).*

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

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

Audit observation

TTTL does not undertake new connections. The Audit Compliance Report was examined to identify any active ICPs that do not have an MEP recorded. The process for decommissioning was examined.

Audit commentary

All ICPs (4) had MEPs assigned. No ICPs were decommissioned during the audit period.

TTTL understand that they are responsible for the ICP while they are the trader noted on the registry until such time an ICP switches out or becomes decommissioned. The process notes that all information must be complete and accurate and discusses critical elements for maintaining registry processes.

Audit outcome

Compliant

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

Code reference

Clause 9 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The registry files and the Audit Compliance report was reviewed. It was discussed with TTTL staff.

Audit commentary

A review of the registry files confirmed that TTTL has not traded any new connections during the audit period. All information for currently traded ICPs was uploaded.

TTTL is aware that they are responsible for the accuracy and timeliness of functions related to all registry requirements. TTTL are aware that they need to review distributor and metering information to ensure the information they have matches.

Audit outcome

Compliant

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 manage ANZSIC codes was examined. The LIS files were reviewed to check ANZSIC codes were valid. It was discussed with TTTL staff.

Audit commentary

A review of the LIS file found all ICPs (4) had a valid domestic ANZSIC code.

Audit outcome

Compliant

3.7. Changes to unmetered load (Clause 9(1)(f) of Schedule 11.1)

Code reference

Clause 9(1)(f) of Schedule 11.1

Code related audit information

if a settlement type of UNM is assigned to that ICP, the trader must populate:

the code ENG - if the load is profiled through an engineering profile in accordance with profile class 2.1 (clause 9(1)(f)(i)); or

the daily average kWh of unmetered load at the ICP - in all other cases (clause 9(1)(f)(ii)).

Audit observation

The LIS files and Audit Compliance reports were checked.

Audit commentary

TTTL policy is to accept applications from customers who do not have unmetered load connected. No UML ICPs were identified in the LIS file.

Audit outcome

Compliant

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

Code reference

Clause 17 Schedule 11.1

Code related audit information

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

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

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

- *the ICP has only 1 customer, embedded generator, or direct purchaser (clause 17(2)(a))*
- *the electricity consumed is quantified by a metering installation or a method of calculation approved by the Authority (clause 17(2)(b)).*

Audit observation

The process for status changes to active was discussed.

The EDA file and the Audit Compliance report were reviewed to identify all status changes to inactive during the audit period. Processes used by TTTL ensure there is only one party per ICP and that all active ICPs have a MEP.

Audit commentary

All ICPs traded by TTTL had the “Active” status. TTTL switching process includes the determination of the “Active” status. Where this is not the case, TTTL will investigate why the status is not “Active” and it will update the registry if it was Switch Move.

Audit outcome

Compliant

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

Code reference

Clause 19 Schedule 11.1

Code related audit information

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

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

Audit observation

The process for status changes to inactive was discussed.

The EDA file and the Audit Compliance report were reviewed to identify all status changes to inactive during the audit period.

Audit commentary

There were no changes to ICPs status during the audit period.

Obligations under the medically dependent and vulnerable consumer guidelines have been taken into account in all disconnection processes. For any disconnection, the customer details will be viewed to ensure that the customer is not a MDVC. Prior to disconnecting any ICP notice will be given as required by those guidelines.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Audit observation

It is a distributor's code obligation to monitor an ICP which has had the status of "New" or "Ready" for 24 calendar months or more. It is expected that a trader be able to respond to such queries from distributors. TTTL does not sign-up new connections.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

4. PERFORMING CUSTOMER AND EMBEDDED GENERATOR SWITCHING

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

Code reference

Clause 2 Schedule 11.3

Code related audit information

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

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

A gaining trader must advise the registry manager of a switch no later than 2 business days after the arrangement comes into effect and include in its advice to the registry manager that the switch type is TR and 1 or more profile codes associated with that ICP.

Audit observation

The EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Standard Switch process was examined and discussed with TTTL staff.

Audit commentary

TTTL processes are compliant with the requirements of the Fair Trading Act 1986.

Customers join TTTL via website. No credit check is performed. The NT file is automatically sent by CHECKBOX within 2 business days of the date that the arrangement with the customer comes into effect. For sites with embedded generation, TTTL will follow up with the customer and may advise if they are unable to provide a service for DG. TTTL will be gifting where DG is present and there is no requirement by the customer for compensation or injection into the local network.

TTTL gained 2 ICPs using the Standard Switch process.

Audit outcome

Compliant

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

Code reference

Clauses 3 and 4 Schedule 11.3

Code related audit information

Within 3 business days after receiving notice of a switch from the registry manager, the losing trader must establish a proposed event date. The event date must be no more than 10 business days after the date of receipt of such notification, and in any 12 month period, at least 50% of the event dates must be no more than 5 business days after the date of notification. The losing trader must then:

- *provide acknowledgement of the switch request by (clause 3(a) of Schedule 11.3):*

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

When establishing an event date for clause 4, the losing trader 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 EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Standard Switch process was examined and discussed with TTTL staff.

Audit commentary

TTTL did not receive any NTTRs.

The company is aware that they need to reply within 3 business days after receiving notice of a switch from the registry manager.

Audit outcome

Compliant

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

Code reference

Clause 5 Schedule 11.3

Code related audit information

If the losing trader provides information to the registry manager in accordance with clause 3(a) of Schedule 11.3 with the required information, no later than 5 business days after the event date, the losing trader must complete the switch by:

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

Audit observation

The EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Standard Switch process was examined and discussed with TTTL staff.

Audit commentary

TTTL did not lose any ICPs in during the audit period. The process is well documented and the company is aware of their obligations.

Audit outcome

Compliant

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

Code reference

Clause 6(1) and 6A Schedule 11.3

Code related audit information

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

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

If the gaining trader disputes a switch meter reading because the switch event meter reading provided by the losing trader differs by 200 kWh or more, the gaining trader must, within 4 calendar months of the registry manager giving the gaining trader written notice of having received information about the switch completion, provide to the losing trader a changed switch event meter reading supported by 2 validated meter readings.

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

Audit observation

The EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Standard Switch process was examined and discussed with TTTL staff.

Audit commentary

During the audit period, TTTL neither received nor sent RR files. The switching documentation provided by TTTL showed the company understanding of how to comply with the above clauses. The company provided evidence for 2 ICPs that compliance with the above clause was met.

Audit outcome

Compliant

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

Code reference

Clause 6(2) and (3) Schedule 11.3

Code related audit information

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

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 6(2)(b));*

- *the gaining trader within 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading.*

Audit observation

The EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Standard Switch process was examined and discussed with TTTL staff.

Audit commentary

A review of the EDA files confirmed that a situation, as described in the clause, did not occur.

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

There were no disputes with a losing trader. If such a situation were to occur in the future it would be resolved in accordance with this clause.

Audit commentary

TTTL stated that they will not decline to accept another traders' validated meter reading or permanent estimate if they are reasonable and appropriate in the applicable circumstances. The company will also provide a reasonable explanation to the other participant where it does decline to accept their validated meter reading or permanent estimate.

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 2 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 EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Switch Move process was examined and discussed with TTTL staff.

Audit commentary

Customers join TTTL via website. No credit check is performed. The NT file is automatically sent by CHECKBOX within 2 business days of the date that the arrangement with the customer comes into effect. For sites with embedded generation, TTTL will follow up with the customer and may advise if they are unable to provide a service for DG. TTTL will be gifting where DG is present and there is no requirement by the customer for compensation or injection into the local network.

TTTL gained 2 ICPs using the Switch Move process. NTMI for ICP 0056175903LCFF0 was backdated. It was discussed with TTTL. The MI switch was backdated as they were advised by the customer that they had already moved into the property on 14/10/2021. The CS file was then provided by the losing trader on 27/10/2021 with an Actual Transfer Date of 19/10/2021. The Actual Transfer Date of 19/10/2021 was then used in TTTL invoicing to the customer and in reconciliation submissions.

Audit outcome

Compliant

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

Code reference

Clause 10(1) Schedule 11.3

Code related audit information

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

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

Audit observation

The EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Switch Move process was examined and discussed with TTTL staff.

Audit commentary

TTTL did not received any NTMIs.

The company is aware that the switch needs to be completed within 5 business days of receiving the notice, if they accept the event date proposed by the gaining trader.

Audit outcome

Compliant

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 EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Switch Move process was examined and discussed with TTTL staff.

Audit commentary

TTTL did not received any NTMIs.

The company is aware that the switch needs to be completed within 10 business days of receiving the notice, if they don't accept the event date proposed by the gaining trader.

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 EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Switch Move process was examined and discussed with TTTL staff.

Audit commentary

TTTL did not received any NTMIs.

The company is aware that they must provide final information to the registry manager in a prescribed form.

Audit outcome

Compliant

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 4 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 2 validated meter readings and the losing trader must either (clause 12(2)(b) and clause 12(3)):*
 - *advise the gaining trader if it does not accept the switch event meter reading and the losing trader and the gaining trader must resolve the dispute in accordance with the disputes procedure in clause 15.29 (with all necessary amendments) (clause 12(3)(a)); or*
 - *if the losing trader notifies its acceptance or does not provide any response, the losing trader must use the switch event meter reading supplied by the gaining trader. (clause 12(3)(b)).*

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

- *the gaining trader will trade electricity from a meter with a half hour submission type in the registry (clause 12(2A)(b));*

- *the gaining trader no later than 5 business days after receiving final information from the registry manager, may provide the losing trader with a switch event meter reading from that meter. The losing trader must use that switch event meter reading. (clause 12(2B)).*

Audit observation

The EDA file was reviewed to determine whether any standard switches occurred. The Switch Breach report was reviewed to identify any non-compliances.

The Switch Move process was examined and discussed with TTTL staff.

Audit commentary

During the audit period, TTTL neither received nor sent RR files. The switching documentation provided by TTTL showed that the company understands how to comply with the above clause.

Audit outcome

Compliant

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

Code reference

Clause 14 Schedule 11.3

Code related audit information

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

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

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

A gaining trader must advise the registry manager of the switch and expected event date no later than 3 business days after the arrangement comes into effect.

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

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

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

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

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

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

Audit observation

The EDA file for the audit period was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

No HH switches occurred in the period covered by this audit.

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

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

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

Audit observation

The EDA file for the audit period was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

No HH switches occurred in the period covered by this audit.

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 3 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 5 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 EDA file for the audit period was reviewed to determine whether any HH switches occurred during the period.

Audit commentary

No HH switches occurred in the period covered by this audit.

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 2 calendar months after the event date of the switch.

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

- *for each ICP, the trader withdrawing the switch request must provide the registry manager with (clause 18(c)):*
 - o *the participant identifier of the trader making the withdrawal request (clause 18(c)(i));*
 - and*
 - o *the withdrawal advisory code published by the Authority. (clause 18(c)(ii))*
- *within 5 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 2 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 EDA file and Switch Breach Report for the period covered by this audit was analysed to assess compliance. The switch withdrawal process was analysed and discussed with TTTL staff.

Audit commentary

TTTL did neither receive nor send NW files.

The Switching documentation describes that withdrawal can only be performed up to 2 calendar months after the event date. Withdrawals will only be declined if TTTL believes processing the switch would not be applicable in the circumstances or does not comply with the Code.

Audit outcome

Compliant

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

Meter readings are received from MEPs. TTTL relies on MEPs to provide accurate readings but as is described in relevant sections, extensive validation is conducted upon uploading readings to CHECKBOX.

Audit commentary

All meter readings used in the switching process are validated meter readings or permanent estimates. The cost of additional interrogation is covered in a commercial agreement between TTTL and MEPs.

Audit outcome

Compliant

4.17. Switch 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

This was discussed during the audit.

Audit commentary

TTTL have noted in their document that no win back processes are applied. The company is aware that no win backs or certain communications are to be made for 180 days.

Audit outcome

Compliant

5. MAINTENANCE OF UNMETERED LOAD

5.1. Maintaining shared unmetered load (Clause 11.14)

Code reference

Clause 11.14

Code related audit information

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

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

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

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

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

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

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

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

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

Audit observation

The LIS file was reviewed to assess if TTTL trades shared unmetered load. The process to identify and monitor unmetered load was discussed.

Audit commentary

It is not the intention of TTTL to take on SUML ICPs. It is part of the validation process in accepting the customer. Customers will be asked to try another trader or to meter the SUML.

Audit outcome

Compliant

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

Code reference

Clause 10.14 (2)(b)

Code related audit information

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

Audit observation

The LIS file was reviewed to assess if TTTL trades shared unmetered load. The process to identify and monitor unmetered load was discussed.

Audit commentary

There are no plans to trade unmetered load ICPs in the foreseeable future. It is not the intention of TTTL to take on SUML ICPs. It is part of the validation process in accepting the customer. Customers will be asked to try another trader or to meter the UML.

Audit outcome

Not applicable

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

Code reference

Clause 10.14 (5)

Code related audit information

If the unmetered load limit is exceeded the retailer must:

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

Audit observation

The LIS file was reviewed to assess if TTTL trades unmetered load. The process to identify and monitor unmetered load was discussed.

Audit commentary

There are no plans to trade unmetered load ICPs in the foreseeable future.

Audit outcome

Not applicable

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

We reviewed the LIS files and the Audit Compliance report for the period covered by this audit. We discussed the company policy in relation to trading distributed unmetered load ICPs.

Audit commentary

The review of registry files showed that TTTL has not been trading distributed unmetered load. There are no plans to trade distributed unmetered load ICPs in the foreseeable future.

Audit outcome

Compliant

6. GATHERING RAW METER DATA

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

Code reference

Clause 10.13, Clause 10.24 and Clause 15.13

Code related audit information

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

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

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

- *there is 1 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

The LIS and EDA files were reviewed. It was discussed with TTTL staff.

Audit commentary

All active ICPs have a MEP, and at least one meter channel. No submission information is determined using subtraction. No new connections were connected during the audit period.

During the period of this audit, TTTL has not been trading ICPs with embedded generation.

TTTL policy is that, for sites with embedded generation, TTTL will follow up with new customer and may advise the customer they are unable to provide a service for DG. TTTL will be gifting where DG is present and there is no requirement by the customer for compensation or injection into the local network.

Audit outcome

Compliant

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 3 months for the grid owner to review and comment on the design*

- *respond within 3 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

TTTL is not responsible for any metering connection connected to the grid.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

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

Code related audit information

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

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

Audit observation

The LIS file was reviewed to identify which profiles are used for reconciliation purposes to determine if any used profiles require certification of any control devices.

Audit commentary

TTTL does not use any profiles requiring control devices. TTTL uses only the HHR profile.

Audit outcome

Compliant

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

Code reference

Clause 10.43(2) and (3)

Code related audit information

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

- *advise the MEP*

- include in the advice all relevant details.

Audit observation

The process related to defective installations was examined. TTTL are aware of the requirement and will be monitoring data and event logs.

Audit commentary

Any defective installations are identified through the meter reading validation process conducted by CHECKBOX or they are notified by MEPs. The validation process also covers bridged metering. If such an issue arises, a SR will be raised asking for an investigation and replacement of a meter if necessary.

MEPs are queried by TTTL if data trends or anomalies in event logs are detected. This includes bridged or bypassed metering that is deemed not fit for purpose.

No defective meters have been identified during the period covered by this audit

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

Meter readings are collected by MEPs. Interrogation requirements and clock synchronisations were reviewed as part of MEP audits.

Audit commentary

The interrogation systems requirements were examined as part of the MEP audits and found to be compliant.

The MEPs provide clock synchronisation and event reports. When clock synchronisation notifications are received, they are used to determine whether any action is required.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

All validated meter readings must be derived from meter readings.

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

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

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

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

Audit observation

The data collection process was examined. TTTL only trades HHR ICPs read remotely.

Audit commentary.

All reads are received from the MEP, or via the switching process. MEPs are responsible for the collection of data.

TTTL does not complete any manual readings or accept customer readings.

Audit outcome

Not applicable

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 LIS file was reviewed. TTTL trades only HHR ICPs.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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 LIS file was reviewed. TTTL trades only HHR ICPs.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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 LIS file was reviewed. TTTL trades only HHR ICPs.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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 4 months, for which consumption information is required to be reported into the reconciliation process. A validated meter reading is obtained at least once every 4 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 LIS file was reviewed. TTTL trades only HHR ICPs.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

The LIS file was reviewed. TTTL trades only HHR ICPs.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 11(1) Schedule 15.2

Code related audit information

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

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

Audit observation

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

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11(2) Schedule 15.2

Code related audit information

The following information is collected during each interrogation:

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

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

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

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

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

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

Audit observation

Metering data for all ICPs traded by TTTL is collected remotely by the MEPs. Interrogation requirements and clock synchronisation were reviewed as part of MEP audits.

Audit commentary

The interrogation systems requirements were examined as part of the MEP audits, and found to be compliant.

Audit outcome

Compliant

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

Code reference

Clause 11(3) Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

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

Audit observation

Metering data for all ICPs traded by TTTL is collected remotely by the MEPs. Log requirements were reviewed as part of the MEP audits.

Audit commentary

The interrogation systems requirements were examined as part of the MEP audits, and found to be compliant.

Audit outcome

Compliant

7. STORING RAW METER DATA

7.1. Trading period duration (Clause 13 Schedule 15.2)

Code reference

Clause 13 Schedule 15.2

Code related audit information

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

Audit observation

HHR data is provided by MEPs. Trading period duration was reviewed as part of the Intellihub and AMS audits.

Audit commentary

MEPs are responsible for meeting compliance with this clause. It is reviewed during their audits. We reviewed data provided by MEPs and confirm that the trading period duration is 30 minutes.

Audit outcome

Compliant

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

Code reference

Clause 18 Schedule 15.2

Code related audit information

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

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

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

Audit observation

Raw meter data is retained by MEPs, and compliance is assessed as part of their MEP audits. Processes to archive and store raw meter data were reviewed.

Audit commentary

All meter reading data is archived and is retained by TTL.

A review of TTL audit trails confirmed that reads cannot be modified without an audit trail being created. Access to modify readings is restricted.

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

TTTL only uses the HHR profile for reconciliation submissions. Processes to record non-metering information were discussed. No external control equipment is used.

Audit commentary

No non-metering information is collected by TTTL.

Audit outcome

Not applicable

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

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

Code reference

Clause 19(1) Schedule 15.2

Code related audit information

If 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

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

The process for the correction of HHR metering information was reviewed. The process for data validation and estimation is well documented.

Audit commentary

If for any reason TTTL detects errors while validating half hour meter readings, the MEP will be contacted. If there is no data provided by MEPs, TTTL will estimate data.

The process for estimation/corrections is as follows:

- if register reads are not available, the consumption is estimated based on consumption history for the ICP
- if there is no profile history, the residual profile shape is used
- if register reads are available, the intervals are estimated so that the total kWh matches the difference between register reads, the profile for the intervals is the same as the same day of the previous week,

No HHR corrections were made during the period covered by this audit.

Audit outcome

Compliant

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

Code reference

Clause 19(3) Schedule 15.2

Code related audit information

A reconciliation participant may use error compensation and loss compensation as part of the process of determining accurate data. Whichever methodology is used, the reconciliation participant must document the compensation process and comply with audit trail requirements set out in the Code.

Audit observation

Error and loss compensation was discussed during the audit.

Audit commentary

TTTL does not trade any installation for which error compensation and loss compensation needs to be applied to determine accurate data.

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

TTL trades HHR ICPs only.

Audit commentary

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

TTL only corrects working data if necessary, and they keep an appropriate audit trail.

Audit outcome

Compliant

9. ESTIMATING AND VALIDATING VOLUME INFORMATION

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

Code reference

Clause 3(3) Schedule 15.2

Code related audit information

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

Audit observation

The estimation processes and classifications were examined during this audit. We checked that the CS switch event meter readings are correctly identified.

Audit commentary

Flags of read types are recorded correctly in CHECKBOX. We checked 3 examples to confirm compliance. TTL stores read type flag against each interval as provided by MEPs.

Audit outcome

Compliant

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

Code reference

Clause 3(4) Schedule 15.2

Code related audit information

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

3(4)(a) - validated meter readings

3(4)(b) - estimated readings

3(4)(c) - permanent estimates.

Audit observation

All readings received from the MEPs are validated upon upload to CHECKBOX.

Audit commentary

Volume information is derived from validated HHR readings provided by the MEP. CHECKBOX has the functionality to use both validated and estimated readings to create reconciliation files.

Where AMI readings are received, volumes are sourced from the AMI metering information. Where data is missing there is a function within the system to create estimates. Where an estimated or switch reading is used, the HHR volumes are derived from actual readings or estimates.

Audit outcome

Compliant

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

Code reference

Clause 3(5) Schedule 15.2

Code related audit information

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

Audit observation

TTTL provided 3 examples of data from AMS and IHUB to demonstrate compliance.

Audit commentary

TTTL provided 3 examples of metering files provided by MEPS. The files are stored in CHECKBOX. Metering data is neither rounded nor truncated upon uploading to CHECKBOX.

Audit outcome

Compliant

9.4. Half hour estimates (Clause 15 Schedule 15.2)

Code reference

Clause 15 Schedule 15.2

Code related audit information

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

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

Audit observation

The HHR estimate process was examined and discussed with TTTL. The process is well documented.

Audit commentary

CHECKBOX estimates the missing data rows using one of three methods. In order of priority:

The first method estimates the data row based on midnight reads on either side:

- i. Values are taken from the Midnight Reads for the day before (ex-ante, offset by -1 day) and the day after (ex-post, offset by +1 day)
- ii. The midpoint is defined by taking the linear interpolation of the two points of data on either side – this defines the total daily consumption of the present day
- iii. All dates and times are converted to local time to account for any daylight savings changes
- iv. The total number of intervals for the present day is calculated by taking the total number of seconds in the day, divided by 30-minute intervals (this can be 46, 48 or 50 intervals depending on DST)
- v. Any missing interval data is estimated as the midpoint (in 2 above) divided by the total number of intervals (in 4 above).

Second method – this is the same approach as the first method, but values are taken from Register Reads if Midnight Reads on either side are not available

The third method estimates the data row based on the most recent interval read:

1. If no Midnight or Register Reads on either side of the date is available, an estimate is derived based on the most recent half hour read of the same weekday
2. The data is filtered by:
 - i. the same day of the week (e.g., Monday, Tuesday etc.)
 - ii. the same metering configuration (e.g., meter serial number, channel number, register content code, energy flow direction etc.)
 - iii. the same hour, minute and second of the day
 - iv. the same ICP number.
3. The most recent half hour read is taken from the filtered query above

If no HHR data is available for an ICP (i.e., it is a new switch), TTTL will use the 'average daily consumption' field of the latest CS file for the ICP to estimate the likely consumption volume amount. A revision file will be sent with the corrected/updated consumption values (on the 13th business day of the reconciliation month) when the actual HHR data is received.

No data was estimated during the period covered by this audit.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 15.2

Code related audit information

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

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

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

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

16(2)(d) - confirmation that there is no obvious corruption of the data, including unexpected 0 values.

Audit observation

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 17 Schedule 15.2

Code related audit information

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

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

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

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

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

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

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

17(4)(f) - a review of the meter and data storage device event log for any event that could have affected the integrity of metering data

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

The HHR data validation was examined and discussed with TTTL staff. The process is well documented.

Audit commentary

Data is downloaded from SFTP servers daily between 6am -7am.

CHECKBOX provides an initial validation (prior to importing) to check for:

- estimated or actual data, ensuring there is a flag recorded for any estimates
- invalid date and times
- unexpected zeros
- negative values
- comparison with expected or previous flow patterns – the import process checks that midnight reads and register reads are monotonically increasing from the day before

Once the half hour, midnight reads or register reads data is imported into a database, CHECKBOX archives the raw data files from the MEP into their AWS cloud storage server.

TTTL reviews log files provided by NGCM and MTRX.

Audit outcome

Compliant

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

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

Code reference

Clause 13.136

Code related audit information

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

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

Audit observation

TTL is neither a generator nor embedded generator.

Audit commentary

This clause is not applicable. Compliance was not assessed

Audit outcome

Not applicable

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

Code reference

Clause 13.137

Code related audit information

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

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

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

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

Audit observation

TTL is neither a generator nor embedded generator.

Audit commentary

This clause is not applicable. Compliance was not assessed

Audit outcome

Not applicable

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

Code reference

Clause 13.138

Code related audit information

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

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

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

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

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

Audit observation

TTL is neither a generator nor embedded generator.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 13.140

Code related audit information

If the generator provides half-hourly metering information to 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

TTL is neither a generator nor embedded generator.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

11. PROVISION OF SUBMISSION INFORMATION FOR RECONCILIATION

11.1. Buying and selling notifications (Clause 15.3)

Code reference

Clause 15.3

Code related audit information

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

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

Audit observation

We reviewed submission files. TTTL only uses the HHR profile for reconciliation submissions.

Audit commentary

TTTL uses the HHR profile, which does not require a trading notification. We confirmed by checking the LIS file and submission files for Feb'21 to Oct'21.

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 2 NSPs to confirm the AV110 ICP days calculation was correct.

We reviewed the GR-100 report provided by the reconciliation manager.

Audit commentary

There were no differences between ICPDAYS calculated by the registry and TTTL.

Audit outcome

Compliant

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

Code reference

Clause 15.7

Code related audit information

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

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

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

Audit observation

TTL submits AV-120 monthly. The process for the calculation of “as billed” volumes was examined.

Electricity Supplied files are extracted from Xero invoice amounts. AV-120 files are created from the billed volumes to customers and compared to meter data and submission files.

Audit commentary

The table below shows a comparison between volumes submitted and supplied (billed).

Month	Volumes submitted	Sum of supplied
1/02/21	110	110
1/03/21	192	192
1/04/21	151	151
1/05/21	371	371
1/06/21	504	504
1/07/21	572	572
1/08/21	517	517
1/09/21	426	426

We noted that volumes supplied are not aggregated by invoice month. Volumes submitted and supplied are for the same month where in reality supplied volumes are usually delayed by one month. It was discussed with the company. TTTLs comment was that “*it has been incorrectly implemented in the system, but we have now fixed. We previously provided BILLED submission files based on the consumption period instead of the invoice date.*”

Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 11.3 With: 15.7 From: 10-Feb-21 To: 31-Oct-21	Billed volumes are not aggregated by invoice month Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are strong. It was discussed during the audit and it was corrected for future submissions. Audit risk rating is recorded as low because there is no impact on settlement		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

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

We examined the process for the calculation and aggregation of HHR data. We compared HHR aggregates information with the HHR volumes data for 4 submissions.

The GR-090 "ICP missing" files were examined for 9 months.

Audit commentary

TTTL provided a set of submission files (AV140) for the month Feb'21 to Oct'21. The file shows volumes for each HHR ICP.

We compared volumes in HHRVOLS and HHRAGGR. The differences between the volumes and aggregates were negligible.

The HHRAGGR files are prepared at ICP level based on submission information. Clause 15.8 states that the HHRAGGR should contain electricity supplied information rather than submission information. The Reconciliation Manager Functional Specification in section 3, described HHRAGGR as HHR submission information that is aggregated per ICP for the whole month.

There is a misalignment between the Code requirements and RM file specification. It is a problem well known to the Authority and is awaiting a resolution.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 11.3 With: 15.7 From: 10-Feb-21 To: 31-Oct-21	Billed volumes are not aggregated by invoice month Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are strong. It was discussed during the audit and it was corrected for future submissions. Audit risk rating is recorded as low because there is no impact on settlement		
Actions taken to resolve the issue		Completion date	Remedial action status
			Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

Non-compliance	Description		
Audit Ref: 11.4 With: 15.8 From: 10-Feb-21 To: 31-Oct-21	HHRAGGR files do not contain electricity supplied information Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	TTTL submits submissions volumes as per the reconciliation manager specification.		

Actions taken to resolve the issue	Completion date	Remedial action status
		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
No action required from TTTL		

12. SUBMISSION COMPUTATION

12.1. Daylight saving adjustment (Clause 15.36)

Code reference

Clause 15.36

Code related audit information

The reconciliation participant must provide submission information to the reconciliation manager that is adjusted for NZDT using 1 of the techniques set out in clause 15.36(3) specified by the Authority.

Audit observation

HHR data is provided by MEPs. Data provided by MEPs is already adjusted for NZDT.

Audit commentary

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

Audit outcome

Compliant

12.2. Creation of submission information (Clause 15.4)

Code reference

Clause 15.4

Code related audit information

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

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

Audit observation

TTTL provided reconciliation data for 9 months. We checked for alleged breaches regarding late files.

Audit commentary

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

We confirmed that TTTL submits volume information on day 4. On the 13th business day of each reconciliation period TTTL will submit volumes if more accurate data is received.

As a part of assessing compliance, we reviewed reconciliation files HHRAGGR, HHRVOLS, and ICPDAYS and corresponding RM files GR-100, GR-090 and GR-170 HHR.

Audit outcome

Compliant

12.3. Allocation of submission information (Clause 15.5)

Code reference

Clause 15.5

Code related audit information

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

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

Audit observation

The process for the allocation of submission volumes was examined and discussed with TTTL staff.

Audit commentary

TTTL has a process in place to compare data recorded in the registry and data stored in CHECKBOX during the month and before each reconciliation run. The LIS file is downloaded daily from the registry.

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

A review of the NSP table confirmed that TTTL is not a grid owner.

Audit commentary

This clause is not applicable. 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 review of registry file confirmed that TTTL does not own any local or embedded network.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

12.6. Grid connected generation (Clause 15.11)

Code reference

Clause 15.11

Code related audit information

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

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

Audit observation

We reviewed the LIS file and the registry NSP table. TTTL is not a grid connected generator.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

12.7. Accuracy of submission information (Clause 15.12)

Code reference

Clause 15.12

Code related audit information

If the reconciliation participant has submitted information and then subsequently obtained more accurate information, the participant must provide the most accurate information available to the

reconciliation manager or participant, as the case may be, at the next available opportunity for submission (in accordance with clauses 15.20A, 15.27, and 15.28).

Audit observation

TTTL provided reconciliation data submitted for 9 months. We analysed the GR-170 HHR for the same period.

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

Audit commentary

TTTL has a process in place to compare data recorded in the registry and data stored in CHECKBOX during the month and before each reconciliation run. CHECKBOX will identify any changes to previous submissions – this includes new estimates based on more recent data, or updated reads with actual data.

According to the process, if TTTL subsequently obtain more accurate information, they will provide it to the reconciliation manager as part of the normal schedule of revision submissions. At the time of this audit, TTTL was trading only 4 ICPs. Metering data provided by MEPs was complete, and actual, there was no requirement to estimate data. No subsequent revisions were submitted because no more accurate information was available.

Currently it is easy to monitor if more accurate information was obtained. As TTTL grow it would be more difficult and time consuming to monitor which files need to be re-submitted and it could lead to non-compliance. Our recommendation is to consider submitting all revisions to the RM regardless of whether more accurate information is obtained.

Audit outcome

Compliant

Description	Recommendation	Audited party comment	Remedial action
TTTL does not provide revision files; the process is for monitoring, if no more accurate information is obtained. Currently TTTL trades 4 ICPs	Consider submitting all revisions to the RM regardless of whether more accurate information is obtained or not.	We do not currently submit revisions unless more accurate information is available. Going forward, we will automate this process so revision files are submitted by 1600 hours on the 13 th business day each reconciliation month, in accordance with this clause.	We intend to begin submitting revision files within the next few months. This will be automated within CHECKBOX. Submission files will be replacement, which will update the RM based on latest, most accurate information.

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

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 2 Schedule 15.3

Code related audit information

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

- *half hour volume information for the total metered quantity of electricity for each ICP notified in accordance with clause 11.7(2) for which there is a category 3 or higher metering installation (clause 2(1)(a)) for each ICP about which information is provided under clause 11.7(2) for which there is a category 1 or category 2 metering installation (clause 2(1)(ac) to 2(1)(ae)):*
 - 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 use volume information (clause 2(3))*
- *to calculate volume information the reconciliation participant must apply raw meter data :*
 - a) *for each ICP, the compensation factor that is recorded in the registry (clause 2(4)(a))*
 - b) *for each NSP the compensation factor that is recorded in the metering installations most recent certification report. (clause 2(4)(b))*

Audit observation

TTTL provided submission files submitted for 9 months. The company submitted HHRVOLS, HHRAGGR, ICPDAYS, and BILLED.

Audit commentary

We assessed compliance with this clause and confirm as follows:

- all TTTL metered ICPs are submitted as HHR
- no profiles requiring a certified control device were used
- no loss or compensation arrangements were required

TTTL strategy is not to trade UML but from time to time it occurs.

Audit outcome

Compliant

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

Code reference

Clause 3 Schedule 15.3

Code related audit information

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

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

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

Audit observation

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 4 and 5 Schedule 15.3

Code related audit information

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

If a seasonal adjustment shape is not available, the methodology for preparing an historical estimate of volume information for each ICP must be the same as in clause 4, except that the relevant quantities

kWh_{Px} must be prorated as determined by the reconciliation participant using its own methodology or on a flat shape basis using the relevant number of days that are within the consumption period and within the period covered by kWh_{Px}.

Audit observation

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

12.12. Forward estimate process (Clause 6 Schedule 15.3)

Code reference

Clause 6 Schedule 15.3

Code related audit information

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

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

Audit observation

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 7 Schedule 15.3

Code related audit information

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

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

Audit observation

Submissions files were reviewed. All ICPs were submitted as HHR.

Audit commentary

There was no profile change. TTTL trades HHR ICPs only.

Audit outcome

Compliant

13. SUBMISSION FORMAT AND TIMING

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

Code reference

Clause 8 Schedule 15.3

Code related audit information

For each category 3 of higher metering installation, a reconciliation participant must provide half hour submission information to the reconciliation manager.

For each category 1 or category 2 metering installation, a reconciliation participant must provide to the reconciliation manager:

- *Half hour submission information; or*
- *Non half hour submission information; or*
- *A combination of half hour submission information and non-half hour submission information*

However, a reconciliation participant may instead use a profile if:

- *The reconciliation participant is using a profile approved in accordance with clause Schedule 15.5; and*
- *The approved profile allows the reconciliation participant to provide half hour submission information from a non-half hour metering installation; and*
- *The reconciliation participant provides submission information that complies with the requirements set out in the approved profile.*

Half hour submission information provided to the reconciliation manager must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *trading period*

The non-half hour submission information that a reconciliation participant submits must be aggregated to the following levels:

- *NSP code*
- *reconciliation type*
- *profile*
- *loss category code*
- *flow direction*
- *dedicated NSP*
- *consumption period or day*

Audit observation

We reviewed the submission file for Feb'21 to Oct'21.

Audit commentary

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

- NSP code

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

Audit outcome

Compliant

13.2. Reporting resolution (Clause 9 Schedule 15.3)

Code reference

Clause 9 Schedule 15.3

Code related audit information

When reporting submission information, the number of decimal places must be rounded to not more than 2 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

We reviewed the rounding of data on the AV090 and AV140 reports as part of the aggregation checks.

Audit commentary

Submission information is appropriately rounded to no more than two decimal places.

Audit outcome

Compliant

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

Code reference

Clause 10 Schedule 15.3

Code related audit information

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

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

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

Audit observation

The LIS file was reviewed. TTTL trades only HHR ICPs. No NHH metered ICPs were traded.

Audit commentary

This clause is not applicable. Compliance was not assessed.

Audit outcome

Not applicable

CONCLUSION

PARTICIPANT RESPONSE