

Electricity Industry Participation Code Distributor Audit Report

for

Waipa Networks Limited



Prepared by Tara Gannon – Veritek Ltd

Date of Audit: 25/07/17

Date Audit Report Complete: 08/08/17

Date Audit Report Due: 19/08/17

Executive Summary

This Distributor audit was performed at the request of **Waipa Networks Ltd (Waipa)**, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at Waipa's premises in Te Awamutu, on 25 July 2017. This audit has been conducted in accordance with the Guideline for Distributor Audits V7.1, which was produced by the Electricity Authority.

The audit found six non-compliance issues and makes three recommendations. Waipa have improved their compliance following the 2016 audit. Improvements have been seen in addressing, initial energisation dates, and recording of unmetered load, but some non-compliance still exists in these areas.

I found many of the non-compliances relating to timeliness were due to corrections. If corrections were identified more quickly, compliance with data accuracy and timeliness requirements would improve. I recommend adding further checks to enable incorrect or missing data to be identified and corrected promptly.

The tables below set out in detail the audit findings:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Timeliness of ICP creation	3.2	11.5(3) of Part 11	ICP 0000293841WA99B was created on the registry four business days after the request was received.	Strong	Low	1	Investigating
Timeliness of initial energisation date population	3.5	7(2A) of Schedule 11.1	44 ICPs had their initial energisation date populated on the registry more than 10 business days after the initial energisation date.	Moderate	Low	2	Identified
Timeliness of registry updates	4.1	8 of schedule 11.1	Some updates to the registry were made more than three business days after the event date.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Incorrect NSP information	4.2	Clause 7(5) & 8(4) of Schedule 11.1	Eight ICPs were mapped to an incorrect NSP.	Moderate	Low	2	Identified
Incomplete or duplicate address information	4.4	2 & 7 (1)(a) of schedule 11.1	65 duplicate addresses. 64 addresses that do not have street numbers or property name information to allow the ICP to be readily located.	Moderate	Low	2	Identified
Incomplete unmetered load information	4.6	7(1) of Schedule 11.1	<ul style="list-style-type: none"> Some distributed generation details were not correctly recorded on the registry. Five ICPs had a registry effective date which did not match the installation paperwork, and two ICPs had registry generation capacity which did not match the installation paperwork. Unmetered load was not recorded on the registry for three active ICPs where the unmetered load details are known. <p>Five initial energisation dates were not correctly recorded on the registry. Four ICPs which were active prior to the audit period did not have an initial energisation date populated.</p>	Moderate	Low	2	Investigating
Breach Risk Rating Score						11	
Indicative Next Audit Frequency						12 months	

Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(1) of part 11	<p>Add the following items to the fortnightly review to improve compliance:</p> <ul style="list-style-type: none"> • NSP match • Active status with no initial energisation date • UNM flag = Y on the registry with no distributor unmetered details • Unmetered tariff in magiQ with no distributor unmetered details populated on the registry <p>Review address details on the registry quarterly:</p> <ul style="list-style-type: none"> • Investigate any ICPs with duplicate addresses • Investigate any ICPs missing address components (e.g. where unit, number and property name are all blank, or where street number and name are blank) to ensure that address information is sufficient to correctly identify the location. 	Identified
NSP information	4.2	8(4) of schedule 11.1 & 11.2 of part 11	Include a check of NSP alignment between NCS and the registry as part of the registry discrepancy process	Identified
Unmetered load	4.6	7(1)(m) of schedule 11.1.	Populate unmetered load format, as recommended by the EA, where possible and confirm which load is correct for the twelve ICPs where there is a variance.	Identified

Persons Involved in This Audit

Auditor:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Waipa personnel assisting in this audit were:

Name	Title
Clara Ruscoe	Customer Services Administrator
Kerry Watson	Customer Service Manager
Lucy Stanley	Customer Services Administrator
Pete Armstrong	Network Asset Manager

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1. Administrative

1.1 Summary of Previous Audit

Waipa provided a copy of their previous audit, conducted in August 2016 by Rebecca Elliot of Veritek Limited. The matters raised are detailed in the table below:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Provision of Information to the Registry	2.3	7(1)(m) of Schedule 11.1	Known unmetered load not recorded on the registry.	Still existing, improvements have been made and all issues were historic. Refer to section 4.6.
Changes to Registry Information	3.1	7, 8 & 20 of Schedule 11.1	Registry events backdated greater than 3 days.	Still existing. Refer to section 4.1.
Notice of NSP	3.2	7(5) & 8(4) of Schedule 11.1	4 ICPs mapped to the incorrect NSP	Still existing. Refer to section 4.2.
ICP Location Address	3.6	2 of Schedule 11.1	121 duplicate addresses 77 addresses that do not have street numbers or other information to allow the ICP to be readily located.	Still existing, improvements have been made. Refer to section 4.4.
Date of ICP Initial Energisation Date	3.7	7(1)(p) & (2A) of schedule 11.1	Incorrect energisation date recorded. Missing initial energisation date.	Still existing, improvements have been made. Refer to section 4.6.

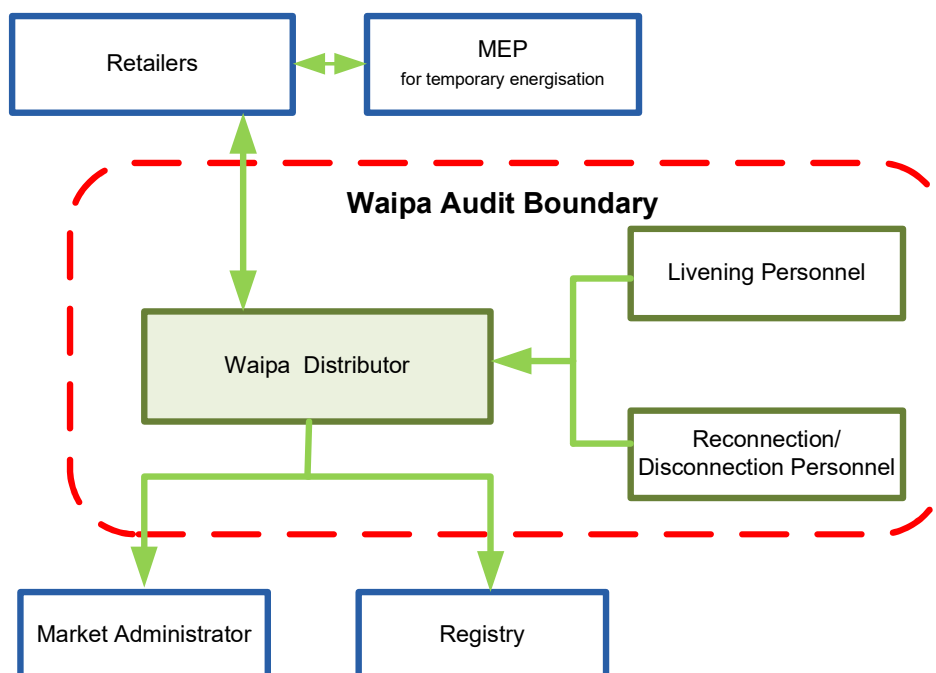
Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Status
Notice of NSP	3.2	8(4) of schedule 11.1 & 11.2 of part 11	Include a check of NSP alignment between NCS and the registry as part of the registry discrepancy process.	Still existing. Refer to section 2.1.
ICP Location Address	3.6	2 & 7 (1)(a) of schedule 11.1	Develop reporting and monitor ICPs with duplicate addresses.	Still existing. Refer to section 2.1.
Date of ICP Initial Energisation Date	3.7	7(1)(p) & (2A) of schedule 11.1	Add any ICPs energised without an initial energisation date populated to the registry discrepancy reporting.	Still existing. Refer to section 2.1.
Details of Unmetered Load Notified	6.1	7(1)(m) of schedule 11.1	Confirm unmetered load details for all new connections.	Cleared. Unmetered load details were populated for all new connections with unmetered load. Refer to section 4.6.
Details of Unmetered Load Notified	6.1	7(1)(m) of schedule 11.1	Populate unmetered load format, as recommended by the EA, where possible.	Still existing. Refer to section 4.6.

1.2 Scope of Audit

This Distributor audit was performed at the request of Waipa, to encompass the Electricity Industry Participation Code requirement for an annual audit, in accordance with clause 11.10 of part 11. The audit was carried out at Waipa's premises in Te Awamutu, on 25 July 2017.

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



Waipa owns and manages the Waipa network. Waipa does not own any embedded networks. All activities covered by this audit are managed at Waipa's head office, in Te Awamutu.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.1, which was produced by the Electricity Authority.

1.3 Balancing Areas and ICP Data

Waipa has responsibility for the Waipa local network only, consisting of the Cambridge and Te Awamutu points of connection, which are each in their own balancing areas.

The table below lists the relevant NSPs, and their associated balancing areas. There has been one change during the audit period. TMU0111 was updated to include I flow from 01/07/16.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network Type	Start Date
WAIP	CBG0111	Cambridge			CBG0111WAIPG	G	01/05/2008
WAIP	TMU0111	Te Awamutu			TMU0111WAIPG	G	01/07/2016

There is still one embedded network (OAK0111) connected to the Cambridge NSP.

Waipa provided a list of all ICPs as at June 2017. A summary of this data by ICP status is shown in the table below.

Status	Number of ICPs (2017)	Number of ICPs (2016)	Number of ICPs (2015)	Number of ICPs (2014)	Number of ICPs (2013)	Number of ICPs (2012)
Distributor (888)	1	1	1	1	1	1
New (999)	28	19	17	21	12	14
Ready (000)	17	15	42	42	71	52
Active	25,942	25,396	24,955	24,473	24,087	23,757
Inactive – vacant (1,4)	389	390	388	410	423	458
Inactive – ready for decommissioning (1,6)	4	4	11	10	37	2
Inactive- de-energised AML remote disconnection (1,7)	18	6	-	-	-	-
Inactive - de-energised at pole fuse (1,8)	4	-	2	1	-	-
Inactive - de-energised at meter box fuse (1,10)	1	-	-	-	-	-
Inactive - de-energised at meter box switch (1,11)	-	-	5	4	-	-
Inactive - new connection in progress (1,12)	28	38	60	3	-	-
Decommissioned	2,507	2,424	2,228	2,144	1,982	1,910

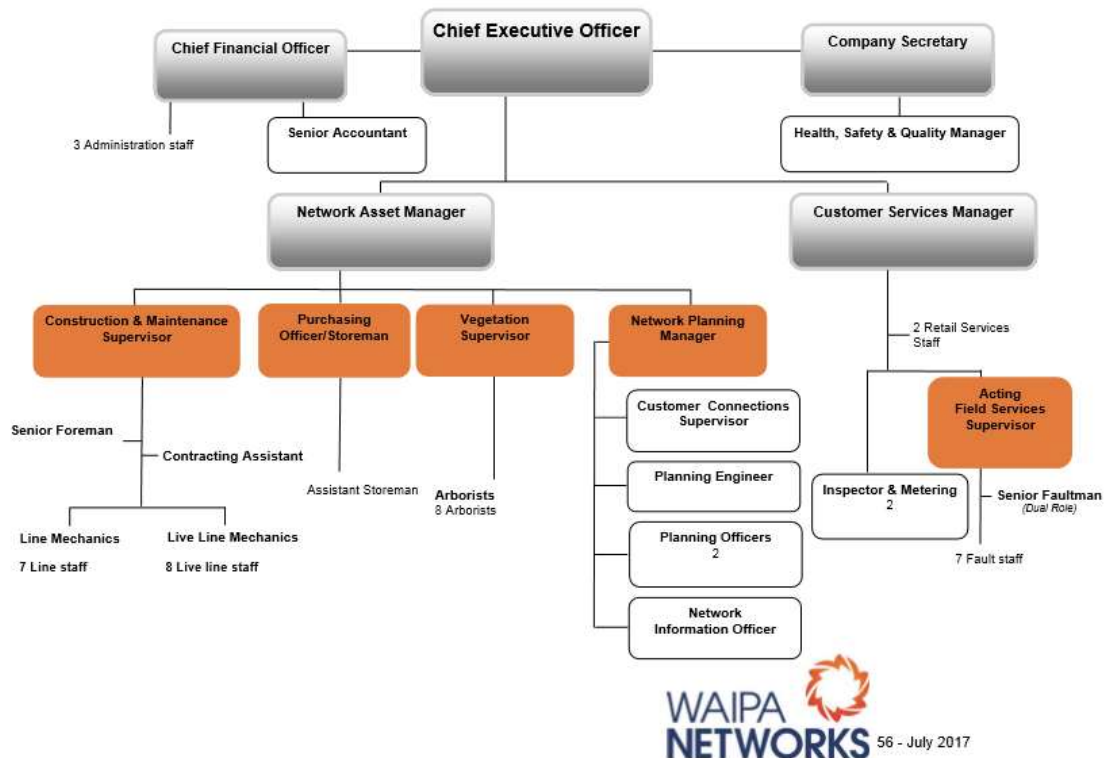
1.4 Exemptions From Obligations to Comply With Code (Section 11 of Electricity Industry Act 2010)

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.

There are no exemptions in relation to this audit that have been granted to Waipa.

1.5 Structure of Organisation

Waipa provided an organisation chart, shown below.



1.6 Supplier List

Activities covered by the scope of this audit, including fieldwork and inspection are conducted by Waipa employees. Occasionally, Waipa may use contractors to assist with special projects, or where workload is heavy, but this occurs infrequently.

1.7 Hardware and Software

Waipa continues to use Napier Computer Systems (NCS) as their hardware and software supplier. The database used for the activities covered by the scope of this audit is referred to in this report as magiQ. The system has been renamed from NCS to magiQ since the last audit, but no material changes to the system have occurred.

The interface between magiQ and the registry is largely automated. The unmetered load fields are populated manually on the registry, and Waipa are working on a system change that will allow this process to be automated. The loss category code automatically defaults to the 400V value, which

applies for almost all customers. For larger customers, Waipa updates the loss category code on the registry manually.

MagiQ cannot process reversals from the registry. Waipa staff review notifications from the registry to identify any reversals, and process them manually in magiQ.

The NCS database is backed up to another server in the Waipa complex. A tape backup is also performed every business day and couriered offsite to Auckland. These backups are restored periodically to check readability.

1.8 Breaches or Breach Allegations

Waipa has no breaches recorded by the Electricity Authority that are relevant to the scope of this audit.

2. Operational Infrastructure

2.1 Requirement to Provide Complete and Accurate Information (Clause 11.2(1) of Part 11)

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 11 is:

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

Audit Observation

Waipa data management processes were examined, including viewing evidence of checks completed and their frequency. The list file as at 30 June 2017 was examined to confirm compliance.

Audit Commentary

Files are transferred between magiQ and the registry daily via SFTP. When a change to a registry field is made in magiQ it is automatically added to a registry update file generated overnight. There are two exceptions to this; unmetered load and loss factors other than LV are processed manually. Updates for reversals processed on the registry must also be updated manually in magiQ.

Waipa have processes in place to check that the data they hold matches the registry.

Fortnightly, magiQ and registry data is compared, and any discrepancies are investigated and resolved. I reviewed the results of the 18 July 2017 review, and noted most of the differences were due to timing. The review focusses on the following fields:

- conflicting retailer
- conflicting tariff
- conflicting status
- number of records.

Other network maintained fields, including address details, NSP details, unmetered details, generation details, initial energisation date and loss factor are not checked as part of the fortnightly review. Loss factor is not stored in magiQ.

New unmetered load occurs rarely. Approximately annually a report is run showing all ICPs created in the last 12 months which have a price code indicating unmetered load. The unmetered load details are checked back to the new connection form. The review this year found 0000262871WAA5F had not had unmetered load details recorded on the registry when the new connection was completed in March 2017. The registry was updated with the unmetered load details on 26/06/2017. This is recorded as non-compliance in section **4.1**.

Distributed generation information stored in magiQ is compared to EIEP1 submissions from retailers where generation is present quarterly. Any discrepancies are investigated, and magiQ and the registry are updated as necessary. I reviewed several of these discrepancy reports and noted that there were usually only a very small number of discrepancies. As Waipa is often also the meter installer, they are usually aware when generation is installed.

Notification files are reviewed, and an email alert is sent if any data has failed to update. I observed this process.

During the audit, I found that registry errors and omissions were not consistently detected and corrected promptly. I recommend adding further checks to improve compliance. I also repeat last year's recommendations to check for ICPs that have been newly energised but have no initial energisation date recorded, and to check NSP alignment between magiQ and the registry.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 11.2(1) of part 11	<p>Add the following items to the fortnightly review to improve compliance:</p> <ul style="list-style-type: none"> • NSP match • Active status with no initial energisation date • UNM flag = Y on the registry with no distributor unmetered details • Unmetered tariff in magiQ with no distributor unmetered details populated on the registry. <p>Review address details on the registry quarterly:</p> <ul style="list-style-type: none"> • Investigate any ICPs with duplicate addresses • Investigate any ICPs missing address components (e.g. where unit, number and property name are all blank, or where street number and name are blank) to ensure that address information is sufficient to correctly identify the location. 	<p>We agree that there would be benefit in adding these items to the reviews and will modify our reporting to do this</p> <p>We will also continue to improve the quality of address information through more regular checks</p>	Identified

2.2 Requirement to Correct Errors (Clause 11.2(2) of Part 11)

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

Waipa data management processes were examined. The list file as at 30 June 2017 was examined to confirm compliance.

Audit Commentary

Waipa have a suite of discrepancy reporting in place as described in section 2.1. Incorrect information is normally corrected as soon as possible upon discovery. I saw evidence of information being corrected promptly during the audit.

In some cases, investigation must be carried out to determine the correct value, which can delay corrections to addresses (refer to section 4.4) or NSPs (refer to section 4.2).

Compliance is confirmed.

3. Creation of ICPs

3.1 Distributors Must Create ICPs (Clause 11.4 of Part 11)

Audit Observation

The new connection process was examined in detail and is described in Section 3.2. A sample of ten new connection applications of the 484 created were checked from the point of application through to when the ICP was created.

Audit Commentary

The process in place is robust and has good controls in place. The sample checked in Section 3.2 below confirms this. Compliance is confirmed.

3.2 Participants May Request Distributors to Create ICPs (Clause 11.5(3) of Part 11)

The distributor, within three business days of receiving a request for the creation of an ICP identifier for an ICP, must either create a new ICP identifier or advise the participant of the reasons it is unable to comply with the request.

Audit Observation

The new connection process was examined in detail. Eleven new connection applications of the 484 created during the audit period were checked from the point of application through to when the ICP was created. A diverse sample was chosen covering seven different participants, both NSPs, dates spread throughout the audit period, and a new connection with unmetered load, to confirm the process and controls worked in practice.

Audit Commentary

Waipa's new connection process has not changed during the audit period. ICPs are created at the "New" status on receipt of an application for network connection from a retailer, a customer, or their agent (normally the electrician). The agent must provide pole or pillar box number on the application

form. This ensures that the correct property is connected. Engineering approval is then sought from the planning department. The application is then forwarded to the nominated retailer for confirmation that they will take responsibility for the ICP. Retailers send a confirmation email to Waipa, or a service request for metering and energisation. Either response serves as confirmation of a retailer's responsibility and an approval to live as required by clause 11.17 of part 11.

A diverse sample of eleven new connections were checked. Ten were updated within three business days of receiving the request, and one was updated within four business days. The late creation of one ICP is recorded as non-compliance below.

Non-compliance	Description	
Audit Ref: 3.2 With: Clause 11.5(3) of Part 11 From/to: 10/02/2017	ICP 0000293841WA99B was created on the registry four business days after the request was received. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach Risk Rating: 1	
Audit Risk Rating	Rationale for audit risk rating	
Low	One ICP was created on the registry one business day late.	
Actions taken to resolve the issue	Completion date	Remedial action Status
We believe this was an exception rather than a systematic issue		Investigating
Preventative actions taken to ensure no further issues will occur	Completion date	
We believe this was an exception rather than a systematic issue		

3.3 Provision of ICP Information to the Registry (Clause 11.7 of Part 11)

The distributor must provide information about ICPs on its network in accordance with Schedule 11.1.

Audit Observation

The new connection process for populating all required registry fields was examined. The list file was examined for all ICPs created during the audit period.

A sample of 11 new connection applications for ICPs created during the audit period were checked from the point of application through to when the ICP was created. A diverse sample was chosen

covering seven different participants, both NSPs, dates spread throughout the audit period, and a new connection with unmetered load, to confirm the process and controls worked in practice.

Audit Commentary

The EDA file for the period July 2016 to June 2017 was evaluated. 562 ICPs were made ready during that period. All were updated on the registry before electricity was traded.

Updates to the registry occur on a nightly basis. The process for updating the registry is automated for all fields except for unmetered load and the loss category code. A recommendation is raised in section 2.1 to add checks to ensure corrections to manually updated information flow through to the registry.

I reviewed a sample of 11 new connections. All information was updated correctly, apart from ICP 0075051915WAF56, which had an incorrect NSP recorded on the registry. This is recorded as non-compliance in section 4.2.

Timeliness of provision of information is discussed in section 3.4 and 3.5 below.

3.4 Timeliness of the Provision of ICP Information to the Registry (Clause 7(2) of Schedule 11.1)

This information is provided as soon as practicable, and before electricity is traded at the ICP.

Audit Observation

The new connection process was examined. The event detail report for the period from July 2017 to June 2016 was examined.

Audit Commentary

Waipa works to update ICPs to ready prior to livening. Waipa recently began using an app which enables quicker workflows, and allows paperwork to be completed in the field using the app on mobile phones. Prior to this, inspectors would photograph their paperwork and send it in to ensure it was received quickly. Review of the registry list and event detail report showed all records were updated before the ICP was made active.

Compliance is confirmed.

3.5 Timeliness of the Provision of the Initial Energisation Date (Clause 7(2A) of Schedule 11.1)

*The **distributor** must provide the information specified in sub-clause (1)(p) to the **registry** no later than 10 **business days** after the date on which the **ICP** is initially **energised**.*

Audit Observation

The new connection process for populating all required registry fields was examined. The event detail report for the period from July 2016 through to June 2017 was examined.

Audit Commentary

Initial energisation date is updated as part of the new connection process. Waipa runs a report from the registry approximately twice per annum to identify ICPs with missing initial energisation dates and update them.

The event detail report was examined and I found that 44 ICPs were updated later than 10 business days after the initial energisation date. I checked a sample of 15 late updates. 11 occurred due to resourcing issues, a staff member was away for six weeks and clean up occurred on her return. The other four were updated between 20 and 67 days late, and had been missed due to human error. Where a job is closed and Waipa is not the meter installer, update of the initial energisation date may be missed. The late population of initial energisation dates is recorded as non-compliance below.

Non-compliance	Description	
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From/to: entire audit period	44 ICPs had their initial energisation date populated on the registry more than 10 business days after the initial energisation date. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach Risk Rating: 2	
Audit Risk Rating	Rationale for audit risk rating	
Low	A relatively small number of ICPs were affected. Many of the late updates appeared to relate to a temporary resourcing issue.	
Actions taken to resolve the issue		Remedial action Status
The dates have been populated		Identified

Preventative actions taken to ensure no further issues will occur	Completion date	
We will allocate more resource to the new connections process and carry out more frequent checks	1 October 2017	

A recommendation to complete this check as part of the fortnightly registry match is made in section **2.1**.

Missing and incorrect initial energisation dates are discussed in section **4.6**.

3.6 Connection of ICPs (Clause 11.17 of Part 11)

A distributor must, when electrically connecting an ICP that is not also an NSP, follow the electrical connection process set out in Clause 10.31.

The distributor must not electrically connect an ICP (except for an ICP across which unmetered load is shared) unless a trader is recorded in the registry as accepting responsibility for the ICP.

In respect of ICPs across which unmetered load is shared, the distributor must not electrically connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load.

Audit Observation

The new connection process was examined. The event detail report for the period from July 2016 through to June 2017 was examined.

Audit Commentary

Review of the registry list confirmed that a trader is recorded for all active and inactive ICPs, and a proposed trader is recorded for all new and ready ICPs.

This clause requires that a distributor must not electrically connect an ICP across which unmetered load is shared unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load.

Waipa does not allow, or intend to allow any new shared unmetered load connections. Review of a registry list confirmed there is no shared unmetered load connected to any Waipa ICP.

Compliance is confirmed.

3.7 Electrical Connection of ICPs that are NSPs (Clause 10.28(7) of Part 10)

A network owner must not electrically connect a new point of connection that is to be quantified by metering unless requested to do so by the:

- MEP (for a temporary energisation); or*
- Reconciliation participant responsible for ensuring there is a metering installation.*

Note this clause focusses on all points of connections to the network including EN and LE ICPs.

Audit Observation

A registry list was received to identify any new connections of ICPs that are also NSPs.

Audit Commentary

The distributor is responsible for creating the ICP for the point of connection for an embedded network to its parent network. No new embedded networks have been created during the audit period. Waipa has one existing embedded network ICP, which has a type of "LE", and was created on 1/5/2008.

3.8 Electrical Connection of an ICP that is not an NSP (Clause 10.31 of Part 10)

A distributor must not electrically connect an ICP that is not also an NSP unless:

- the trader trading at the ICP has requested the electrical connection; or*
- the MEP who has an arrangement with the trader trading at the ICP has requested temporary energisation of the ICP.*

Audit Observation

The new connection process was examined in relation to ICPs that are not also NSPs to Waipa's network. The event detail report for the period from July 2016 through to June 2017 was examined.

Audit Commentary

Analysis of the registry list with history for July 2016 to June 2017 confirmed that all ICPs with ready status had a proposed retailer recorded. Compliance is confirmed.

Waipa creates all new ICPs at ready status and all have a trader who has requested and accepted responsibility for the ICP as confirmed by examination of the list file. Compliance is confirmed.

3.9 Electrical Connection of an NSP that is not a Point of Connection to the Grid (Clause 10.30(2) of Part 10)

A distributor must, within five business days of electrically connecting an NSP that is not also a point of connection to the grid, notify the reconciliation manager of the following in the prescribed form:

- the NSP electrically connected*
- the date of the electrical connection*
- the participant identifier of each MEP*
- the certification expiry date for each metering installation.*

Audit Observation

A registry list was received to identify any new connections of ICPs that are also NSPs.

Audit Commentary

The distributor is responsible for creating the ICP for the point of connection for an embedded network to its parent network. No new embedded networks have been created during the audit period. Waipa has one existing embedded network ICP, which has a type of "LE", and was created on 1/5/2008.

3.10 Definition of ICP Identifier (Clause 1(1) of Schedule 11.1)

Audit Observation

The new connection process was examined and a sample of 10 ICPs checked.

Audit Commentary

When a new ICP is created, the address is checked in magiQ to determine whether it is a duplicate, and on Quick Maps to confirm its location. The ICP position in relation to other ICPs in the street is determined, Waipa prefers ICPs to be consecutively numbered. The staff member entering the new connection adds four digits, and magiQ automatically adds the leading zeros, distributor code and a compliant checksum.

MagiQ does not allow duplicate ICP numbers to be created, but staff routinely check for duplicates before entering the ICP number.

A sample of ten new ICPs were checked. All were created in the appropriate format. The sample checked confirmed compliance.

3.11 Loss Category (Clause 6 of Schedule 11.1)

Audit Observation

The list file was examined to confirm all active ICPs have a single loss category code.

Audit Commentary

The registry list was examined and all ICPs have a single loss category code, except new and decommissioned ICPs which have a blank loss category. Each loss category code clearly identifies the relevant loss factor.

Compliance is confirmed.

3.12 Management of “New” Status (Clause 13 of Schedule 11.1)

Audit Observation

The management of ICPs in relation to the use of the new status was examined. The list file and event detail report for the period July 2016 to June 2017 were examined in relation to the use of the new status.

Audit Commentary

ICPs are created at new on receipt of an application for network connection from a retailer, a customer or their agent. The new status is only used where the ICP is at the construction phase, and is changed to ready once a trader has accepted responsibility.

I reviewed a sample of eleven applications for new connections, and noted that the forms specified the electricity retailer. Once the new connection is approved by Waipa, it is forwarded to the retailer to confirm that they will take responsibility. The retailer provides confirmation by email, or by making a request for metering and energisation. Either response serves as confirmation of a retailer's responsibility and an approval to live as required by clause 11.17 of part 11.

Examination of the list file and event detail report confirmed the status is used compliantly.

3.13 Monitoring of “New” & “Ready” Statuses (Clause 15 of Schedule 11.1)

Audit Observation

The process of the management of ICPs at the new and ready status was examined. The list file was examined for any ICPs at the new or ready status for greater than 12 months.

Audit Commentary

A registry list was reviewed to identify any ICPs which have been at new or ready status for more than 12 months, shown below. Waipa confirmed that the appropriate retailer was contacted for each of these ICPs in June 2017 to confirm whether the new connection was still required. One ready ICP was not approved by the planning team, and has been sent back to the retailer for update.

Status	Count of ICPs at status for more than 12 months	Count of ICPs at status for more than 24 months
New	9	9
Ready	2	-

Reporting is in place to identify and investigate ICPs which have been at new or ready status for more than 12 months. I saw evidence of the last review completed in June 2017.

Compliance is confirmed.

3.14 Embedded Generation Loss Category (Clause 7(6) of Schedule 11.1)

If the ICP connects the distributor's network to an embedded generating station that has a capacity of 10 MW or more (clause 7(1)(f) of Schedule 11.1):

The loss category code must be unique; and the distributor must provide the following to the reconciliation manager:

- the unique loss category code assigned to the ICP*
- the ICP identifier of the ICP*
- the NSP identifier of the NSP to which the ICP is connected*
- the plant name of the embedded generating station*

Audit Observation

This requirement was discussed and the list file was examined.

Audit Commentary

Waipa has one embedded generator connected to its network that has its own loss category code of "FT". This is for Fonterra Te Awamutu (0000400202WA9B7). Waipa's embedded generation application form has a field to record the capacity to ensure any new generation connections greater than 10MW are identified. There has been no new embedded generation greater than 10MW added during the audit period.

Compliance is confirmed.

4. Maintenance of Registry Information

4.1 Changes to Registry Information (Clause 8 of Schedule 11.1)

When information that is held by the registry changes, the distributor responsible for that ICP must provide notice to the registry of that change within three business days of that change taking effect unless the change is to the NSP identifier of the NSP to which the ICP is usually connected (other than a change that is the result of the commissioning or decommissioning of an NSP).

In those cases, notification must be given no later than eight business days after the change takes effect. If the change to the NSP identifier is for more than 14 days, the time within which notification must be effected in accordance with Clause 8(3) of Schedule 11.1 begins on the 15th day after the change.

Audit Observation

The process to manage ICP changes were examined. The event detail report for July 2016 to June 2017 was reviewed. I used the typical case methodology examining a sample of at least ten late updates for any change where the initial analysis could not determine the cause.

Audit Commentary

The event detail report was analysed, and found:

Address events

There were 980 address events during the audit period; 940 (95.9%) were updated within three business days.

A sample of ten late address updates were reviewed, all were found to be corrections to existing addresses. I found that in most cases the change was at the request of a retailer, or discovered when a fault was logged at the property or a neighbouring address. Three changes related to corrections when properties were subdivided. Changes were backdated to ensure that the property had the correct address recorded historically.

Network Events

There were 1289 network events during the audit period; 1160 (90.0%) were updated within three business days.

A sample of 17 late network updates were reviewed.

- Eight of these relate to distributed generation details being added. I confirmed that all were updated on the registry within one day of paperwork being received.
- Six of these relate to the population of the initial energisation date. These are discussed in Section 3.5 as this requirement is assessed under Clause 7(2A).
- One related to unmetered load details being populated for ICP 0000262871WAA5F. The ICP was updated to active on the registry on 23/03/17, and the trader unmetered details were updated at the same time. The distributor unmetered details were not updated until 26/06/17, with an effective date of 26/06/17 when the omission was identified during a routine annual check for missing unmetered load details. A recommendation to check unmetered load details more frequently is raised in section 2.1.
- Two related to delays in receiving information about a connection from another party.

Pricing Events

There were 933 pricing events during the audit period; 778 (83.4%) were updated within three business days.

A sample of 11 late pricing updates were reviewed.

- Six events were corrections to customer pricing. I note all that all were updated as soon as they were notified to Waipa.
- Four events related to corrections initiated by Waipa, when they discovered that a group of ICPs had been billed incorrectly.
- One event related to an ICP livened after a price change came into effect, so its price needed to be updated. This is compliant with Waipa's pricing methodology.

Waipa continue to backdate pricing events, but only if it is found that the customer has been billed incorrectly. This meets the requirement to provide correct and accurate information but does cause a technical non-compliance for the late updating of the registry in these instances.

Status Events

There were 764 pricing events during the audit period; 722 (94.5%) were updated within three business days.

A sample of ten late status updates were reviewed.

- Seven related to late updates to decommissioned, where the ICP had been created in error, or an old site that needed to be decommissioned was identified by the retailer or Waipa.

- There were two late updates to ready, as there was a delay in receiving paperwork and Waipa had not completed the meter install themselves.
- There was one late update to new, where the file generated by magiQ for transfer to the registry was incomplete. The error was not initially noticed, and the errors were identified and corrected 10 days later.

Non-compliance	Description		
Audit Ref: 4.1 With: Clause 8 of schedule 11.1 From/to: July 2016-June 2017	Some updates to the registry were made more than three business days after the event date. Potential impact: Low Actual impact: Low Audit history: Four times previously Controls: Moderate Breach Risk Rating: 2		
Audit Risk Rating	Rationale for audit risk rating		
Low	Across all events 91% were updated on the registry within three business days. In many cases delays were due to historic corrections and indicate that data is being reviewed and corrected.		
Actions taken to resolve the issue	Completion date	Remedial action Status	
These have all been updated		Identified	
Preventative actions taken to ensure no further issues will occur	Completion date		
Compliance is not possible where information is received late. However we will allocate more resource to those processes affecting the Registry updates to help prevent late updates due to our own errors.	1 October 2017		

4.2 Notice of NSP for Each ICP (Clauses 7(1), 7(4) & (5) of Schedule 11.1)

Audit Observation

The new connection process was examined. The registry list was reviewed to identify any ICPs which may not be linked to the correct NSP.

Audit Commentary

Waipa's planning department list the transformer number and GXP on each application for network connection. The NSP is determined by selecting the correct "sub" number.

If a sub number is corrected in magiQ the change is not automatically updated on the registry, because sub number is not a registry field. Users must update the NSP manually on the registry.

I analysed the list file to identify any ICPs where it appeared possible the NSP was recorded incorrectly on the registry. I reviewed:

- all ICPs where the physical address town listed was inconsistent with the NSP; and
- all streets where more than one NSP had been assigned to ICPs located on that street.

The affected ICPs were viewed on maps to confirm the correct sub, and NSP. In most cases I found that either the street was long, and ICPs were correctly recorded with different NSPs, or the load was DUML and covered a large area. I found seven ICPs where the NSP was recorded incorrectly.

Address	Count of ICPs on street	Count of CBG0111 ICPs on street	Count of TMU0111 ICPs on street	Comments
Cambridge Road, Te Awamutu	187	1	186	0000769083WA8F3 should be connected to TMU0111.
Fillery Road, Te Pahu	2	1	1	0022351892WA3E1 should be connected to TMU0111.
Lyon Street, Kihikihi	112	1	111	0000131461WA1DE should be connected to TMU0111
Mellow Road, Kaipaki	10	6	4	0000192723WA4F5, 0001927230WA37C, 0000192702WA5E5 and 0000192701WA925 should be connected to CBG0111.

The number of discrepancies found was low but I recommend that the NSP field is checked as part of the registry discrepancy process to catch any future such incidences.

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 8(4) of schedule 11.1 & 11.2 of part 11	Include a check of NSP alignment between NCS and the registry as part of the registry discrepancy process.	We agree that this should be checked as part our discrepancy process and will modify reports accordingly.	Identified

I checked the NSPs listed on 11 applications for network connection, and matched them to the NSPs recorded on the registry. I found that ten matched, but ICP 0075051915WAF56 was listed with transformer 20948 and NSP TMU0111 on the form, but the registry shows CBG0111.

The eight ICPs with incorrect NSPs on the registry are recorded as non-compliance below.

Non-compliance	Description	
Audit Ref: 4.2 With: Clause 7(5) & 8(4) of Schedule 11.1 From/to: Entire audit period	Eight ICPs were mapped to an incorrect NSP. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach Risk Rating: 2	
Audit Risk Rating	Rationale for audit risk rating	
Low	A small number of ICPs are affected.	
Actions taken to resolve the issue	Completion date	Remedial action Status
We will correct these	01/10/17	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
We will include regular checks of these in reporting as above	01/10/17	

4.3 Customer Queries About ICP (Clause 11.31 of Part 11)

Audit Observation

The management of customer queries was examined.

Audit Commentary

Waipa does receive direct requests for ICP identifiers and these are provided immediately, by looking up the ICP based on information that the customer provides. Compliance is confirmed.

4.4 ICP Location Address (Clauses 2 & 7(1)(a) of Schedule 11.1)

Each ICP identifier must have a location address that allows the ICP to be readily located.

Audit Observation

The process to manage address accuracy was examined and the list file was analysed.

Audit Commentary

Each ICP identifier must have a location address that allows the ICP to be readily located. When creating new ICPs, staff check manually to determine if the address is a duplicate.

Waipa's list file was examined and found 65 duplicate addresses for ICPs that are not decommissioned. This is a reduction from the 121 duplicate addresses recorded in 2016. 17 of the duplicates were created during the audit period.

Duplicate addresses typically occur in situations where:

- there are multiple shops within a building, without unit numbers;
- there are multiple buildings at the same address, such as a house and shed; or
- a new house is being built at an address with an existing connection.

A new expressway in Cambridge also resulted in some road name changes, which caused some duplication.

The list of ICPs with duplicate addresses have been provided to Waipa to investigate, and four addresses have since been corrected on the registry. Waipa intends to use the property name to clarify the address where there are multiple buildings or tenancies at the same address. I repeat the last audit's recommendation to develop reporting to identify ICPs with duplicate addresses in section **2.1**.

60 ICPs do not have a street number, and do not have information in the property name field that would enable the ICP to be readily located. Four ICPs do not have a physical address number, or street name. This is a reduction from the 77 ICPs recorded in 2016. Waipa are working to improve addressing, and intend to:

- visit some of the ICPs to confirm the address
- use additional address information relating to the transformer to update the registry where necessary.

The list of ICPs with incomplete addresses has been sent to Waipa to investigate.

Non-compliance	Description		
Audit Ref: 4.4 With: Clause 2 & 7 (1)(a) of schedule 11.1 From/to: Entire audit period	65 duplicate addresses. 64 addresses that do not have street numbers or property name information to allow the ICP to be readily located. Potential impact: Low Actual impact: Low Audit history: Five times previously Controls: Moderate Breach Risk Rating: 2		
Audit Risk Rating	Rationale for audit risk rating		
Low	This is an improvement from last year, and Waipa intends to work through and resolve these issues. In most cases the address appears to be correct, but further information is required to clarify the exact location and differentiate from other addresses.		
Actions taken to resolve the issue		Completion date	Remedial action Status
We will correct these		01/10/17	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We will include regular checks of these in reporting.		01/10/17	

4.5 ICP De-energisation (Clause 3 of Schedule 11.1)

Each new ICP created after 7 October 2002 must be able to be de-energised without de-energisation of any other ICP. Unless it is an ICP that represents the consumption calculated by difference between the total consumption for the embedded network and all other ICPs on that embedded network.

Audit Observation

This was examined as part of the new connection process and proof of process was checked as part of the sample of new connections examined.

Audit Commentary

This requirement is well understood by personnel involved in livening and is included in Waipa's Network Connection Standards. The new connections process requires contractors to identify the disconnection point for all new ICPs and document it on the application for new connection form. I

reviewed a sample of eleven new connections. In all cases the form showed that the ICP would have an individual service line and connection point to the network pole or pillar. Compliance with this requirement is confirmed.

4.6 Distributors to Provide ICP Information to the Registry (Clause 7(1) of Schedule 11.1)

The distributor must provide to the registry the information listed in clause 7(1) of schedule 11.1.

Audit Observation

The new connection and updating of ICP information processes for populating all required registry fields was examined. The list file was examined to check for the population of all required information and its alignment with the trader where appropriate including distributed generation, and unmetered load.

Audit Commentary

The interface between magiQ and the registry is largely automated. The unmetered load fields are populated manually, and Waipa are working on a system change that will allow this process to be automated. The loss category field automatically defaults to the 400V value, which applies for almost all customers. For larger customers, Waipa updates the code on the registry manually.

Distributed Generation

Examination of the list file found 218 active ICPs with generation capacity (an increase from the 131 recorded in 2016). All had an installation type of "B" and the fuel type and capacity recorded. Waipa have a robust approval process before allowing distributed generation to be connected to their network. This includes a check that export/import metering is installed on their application form and confirmation from the Retailer that will accept the generation.

A very small number of updates were late to the registry. Non-compliance is recorded in relation to this is recorded in Section 4.1.

I checked the distributed generation information populated on the registry against the paperwork provided for a sample of ten ICPs. I found:

- Five ICPs had registry effective date two to five days after the date recorded on the paperwork.

ICP	Registry Effective Date	Installation Paperwork Date
0007158244WA01A	8/05/2017	04/05/2017
0007158107WAD7C	27/03/2017	22/03/2017

ICP	Registry Effective Date	Installation Paperwork Date
0007154168WA6D2	23/12/2016	21/12/2016
0000284226WAD2A	7/04/2017	04/04/2017
0000764921WA340	10/11/2016	07/11/2016

- Two ICPs had registry generation capacity which differed from the paperwork

ICP	Registry Generation Capacity	Installation Paperwork Generation Capacity
0007156087WA9F2	3.5	3.18
0007347018WA852	7	4

- Two ICPs with insufficient information to verify whether capacity was recorded correctly.

This is recorded as non-compliance at the end of this section.

Unmetered Load

Waipa allows standard unmetered load, but does not allow shared unmetered connections to their network. Review of the registry list confirmed that there was no shared unmetered load.

MagiQ records an unmetered load information, but is not configured to output this information in a suitable format for registry update. The unmetered load information Waipa populates on the registry is entered manually. Non-compliance is raised in section 4.1 for late update of unmetered information.

There are 49 active ICPs with UML flag set to Y, and no or 0 distributor unmetered details populated. 41 of these ICPs were created prior to 2000, and 5 of the ICPs were created between 2000 and 2011. None were created during the audit period. I checked all three affected ICPs created in the last six years and found that unmetered load details were available on the application for network connection form, but had not been entered. This is recorded as non-compliance at the end of the section.

I reviewed the 88 active ICPs which Waipa had populated distributor unmetered load details for. In 50 cases, the distributor unmetered load details were in the expected format. In the other 38 cases, the distributor unmetered load details appeared to provide only a total unmetered kWh figure, or partial information detailing the wattage and hours on. I repeat last year's recommendation that, where possible, the correct format is adopted.

For 12 active ICPs, the unmetered load details populated by Waipa and the trader gave a different unmetered kWh. I recommend Waipa liaise with the retailer to confirm the correct load.

ICP	Unmetered load details - Distributor	Calculated daily unmetered kWh based on distributor information	Daily Unmetered kWh populated by retailer	Unmetered Load Details - Retailer
0007659000WAD19	0.15	0.15	170.66	0
0005666136WA754	1	1	0.44	0018;24.0;Payphone

ICP	Unmetered load details - Distributor	Calculated daily unmetered kWh based on distributor information	Daily Unmetered kWh populated by retailer	Unmetered Load Details - Retailer
				24hr with WiFi
0007265228WAB4C	1	1	5.5	0230;24.0;Telecom cabinet
0001065354WA34A	1.3	1.3	0.11	0009;12.0;Payphone 12hr no WiFi
0000120950WA62A	1.3	1.3	0.22	0009;24.0;Payphone 24hr no WiFi
0075051045WAE57	0.005;24;METRIXREPEA TER	0.12	0.264	00:00.0
0003003185WA2A0	0.005;24;METRIXREPEA TER	0.12	0.264	00:00.0
0001941675WA70F	0.005;24;METRIXREPEA TER	0.12	0.264	00:00.0
0000293803WABBB	0.005;24;METRIXREPEA TER	0.12	0.264	00:00.0
0000292914WA478	0.005;24;METRIXREPEA TER	0.12	0.27	0011;24;REPEATER
0002010675WA10D	0.005;24;METRIXREPEA TER	0.12	0.264	00:00.0

Recommendation	Description	Audited party comment	Remedial action
Regarding: Clause 7(1)(m) of schedule 11.1.	Populate unmetered load format, as recommended by the EA, where possible and confirm which load is correct for the twelve ICPs where there is a variance.	We will liaise with the Retailers to resolve these discrepancies	Identified

Initial Energisation Date

Initial energisation dates were reviewed on the EDA file for 492 ICPs created during the audit period. Of these:

- Three active ICPs did not have an initial energisation date entered. These were timing differences and have since been updated. One ICP was made active early in error by the retailer and has since been corrected.
- 25 ICPs had an initial energisation date which did not match the earliest active date. All these ICPs were investigated to determine the correct date. Waipa was correct in 20 cases, and intends to update its records for the other five. This an improvement from last year where ten initial energisation dates were suspected to be incorrect.

ICP	Distributor Initial Energisation Date	Earliest retailer active date	Latest Meter Certification Date	Comments
0003119841WAF81	2/09/2016	17/11/2016	17/11/2016	Waipa correct
0002332415WA2C3	6/03/2017	2/05/2017	2/05/2017	Waipa correct

ICP	Distributor Initial Energisation Date	Earliest retailer active date	Latest Meter Certification Date	Comments
0000135611WA804	13/10/2016	25/11/2016	25/11/2016	Should be 23/11/2016
0007184006WAFEC	23/02/2017	7/03/2017	7/03/2017	Waipa correct
0007435016WA73B	13/09/2016	21/09/2016	13/09/2016	Waipa correct
0002010815WA8F6	7/09/2016	15/09/2016	15/09/2016	Waipa correct
0007655196WA1F5	5/08/2016	8/08/2016	8/08/2016	Waipa correct
0000530817WA11F	11/11/2016	14/11/2016	14/11/2016	Waipa correct
0001314795WA34C	20/07/2016	21/07/2016	21/07/2016	Waipa correct
0001453675WAA0C	12/10/2016	13/10/2016	13/10/2016	Waipa correct
0076909785WAC18	14/03/2017	15/03/2017	15/03/2017	Waipa correct
0001252106WAC54	17/05/2017	18/05/2017	17/05/2017	Waipa correct
0018040474WAE14	10/08/2016	11/08/2016	11/08/2016	Should be 11/08/2016
0071622635WA6D9	26/10/2016	25/10/2016	26/10/2016	Waipa correct
0000530705WA438	22/09/2016	21/09/2016	21/09/2016	Waipa correct
0002029002WA210	27/10/2016	26/10/2016	26/10/2016	Waipa correct
0061110334WAA75	7/11/2016	6/11/2016	6/11/2016	Waipa correct
0000180976WAC18	27/07/2016	26/07/2016	26/07/2016	Waipa correct
0112737004WAE2E	14/12/2016	13/12/2016	13/12/2016	Waipa correct
0071580345WAF9D	6/06/2017	2/06/2017	17/05/2017	Waipa correct
0007626004WAFCA	6/12/2016	1/12/2016	1/12/2016	Waipa correct
0072960026WABD6	16/05/2017	6/05/2017	16/05/2017	Should be 17/05/2017
0000766858WA208	28/02/2017	17/02/2017	28/02/2017	Waipa correct
0007657121WADCD	2/06/2017	2/03/2017	1/03/2017	Should be 02/03/2017
0007690067WA733	2/03/2017	16/11/2016	21/11/2016	Should be 16/06/2016

- Four ICPs had an initial energisation date which differed from the meter certification date, where Waipa and the retailer had recorded the same active date. All had the correct date recorded by Waipa.

In addition, four ICPs which were active prior to the audit period (0000191430WA37B, 000135288WA5B3, 0007125144WA380 and 0021340050WA60C) did not have an initial energisation date populated. This is a significant improvement from, last year where 59 ICPs with no initial energisation date were identified.

Timeliness of provision of information on initial energisation date is discussed in section 3.5.

The incorrect population of initial energisation and missing initial energisation dates is recorded as non-compliance below.

Non-compliance		Description	
Audit Ref: 4.6 With: Clause 7(1) of schedule 11.1 From/to: Entire audit period		<ul style="list-style-type: none"> Some distributed generation details were not correctly recorded on the registry. Five ICPs had a registry effective date which did not match the installation paperwork, and two ICPs had registry generation capacity which did not match the installation paperwork. Unmetered load was not recorded on the registry for three active ICPs where the unmetered load details are known. Five initial energisation dates were not correctly recorded on the registry. Four ICPs which were active prior to the audit period did not have an initial energisation date populated. <p> Potential impact: Low Actual impact: None Audit history: Three times previously Controls: Moderate Breach Risk Rating: 2 </p>	
Audit Risk Rating		Rationale for audit risk rating	
Low		<ul style="list-style-type: none"> There are only 218 active connections with distributed generation. Waipa does not accept unmetered load without an attachment to the network connection form which contains the unmetered load details. None of the ICPs with missing unmetered details were created during the audit period. The traders had recorded unmetered load details. There has been a significant improvement in the completeness and accuracy of initial energisation dates since the last audit. A small number of ICPs are affected. 	
Actions taken to resolve the issue		Completion date	Remedial action Status
We will update the Registry with the correct details		01/10/17	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We are undertaking a review of resourcing for these processes with a view to improving accuracy and timeliness of the information		01/10/17	

4.7 Provision of Information to Registry after the Trading of Electricity at the ICP Commences (Clause 7(3) of Schedule 11.1)

The distributor must provide the following information to the registry no later than 10 business days after the trading of electricity at the ICP commences:

- the actual price category code assigned to the ICP (Clause 7(3)(a) of Schedule 11.1)*
- the actual chargeable capacity of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(b) of Schedule 11.1)*
- the actual distributor installation details of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(c) of Schedule 11.1)*

Audit Observation

The new connection process was examined in detail. The backdated pricing changes were checked against the newly connected ICPs identified through the list.

Audit Commentary

Waipa can confirm these details in most cases prior to energisation of the ICP. If any changes are required these are updated as soon as possible. The backdated price category changes were checked in section 4.1 and relate to corrections. Compliance is confirmed.

4.8 GPS Co-ordinates (Clause 7(8) & (9) of Schedule 11.1)

If a distributor populates the GPS coordinates (optional), it must meet the NZTM2000 standard in a format specified by the Authority.

Audit Observation

Waipa do not populate GPS co-ordinates therefore this clause was not evaluated.

Audit Commentary

N/A

4.9 Management of “Ready” Status (Clause 14 of Schedule 11.1)

Audit Observation

The management of ICPs in relation to the use of the ready status was examined. The list file and event detail report for July 2016 to June 2017 were examined in relation to the use of the ready status.

Audit Commentary

Waipa's new connections process is well designed, and as noted in Section **3.2**, Waipa ensures that a retailer has taken responsibility for ICPs before the status is changed from new to ready. All ICPs with ready status have an expected retailer populated.

Waipa's magiQ system will only allow one price category; therefore, the requirement to ensure that an ICP has a single price category will always be met. This was confirmed by checking the list file.

ICPs at ready status for more than 12 months are discussed in section **3.13**. These ICPs are monitored by Waipa and followed up with the retailer.

The records of 10 recently created ICPs were examined and compliance is confirmed.

4.10 Management of "Distributor" Status (Clause 16 of Schedule 11.1)

Audit Observation

The registry list was examined to confirm whether there are any ICPs with shared unmetered load or embedded networks.

Audit Commentary

Waipa's list file shows one ICP which has an ICP status of "Distributor", and this is a point of connection between an embedded network and the Waipa network.

Waipa does not have any shared unmetered load ICPs, and has no intention of allowing new shared unmetered load ICPs.

Compliance is confirmed.

4.11 Management of "Decommissioned" Status (Clause 20 of Schedule 11.1)

Audit Observation

The management of ICPs in relation to the use of the decommissioned status was examined. The list file and event detail report for the period from July 2016 to June 2017 were examined in relation to the use of the decommissioned status.

Audit Commentary

All ICPs that have been de-energised for more than 280 days are monitored. Notification is sent to the retailers of these ICPs, with a request for permission to permanently decommission. If this is confirmed by the trader the process to decommission the site is followed. Requests for decommissioning are also received directly from traders. A site verification process is followed to ensure that electrical installations associated with ICPs are physically removed before the decommissioned status is used.

Waipa's overall management of decommissioning is very robust. Review of the registry list showed there were four ICPs at ready for decommissioning status. These had all been decommissioned by the time the audit was completed. Compliance is confirmed.

The timeliness of updates to the registry is discussed in Section 4.1 above.

4.12 Maintenance of Price Category Codes (Clause 23 of Schedule 11.1)

Audit Observation

The price category code table on the registry was examined.

Audit Commentary

Waipa keeps the price category table up to date and has not created any new price category codes since 1 June 2016. These changes were reviewed during the last audit. Compliance is confirmed.

5. Creation and Maintenance of Loss Factors

5.1 Updating Table of Loss Category Codes (Clause 21 of Schedule 11.1)

Distributors must keep up to date the table in the registry of the loss category codes that may be assigned to ICPs on each distributor's network, by entering in the table any new loss category codes. Each entry must specify the date on which each loss category code takes effect, which must not be earlier than two months after the date the code is entered in the table.

Audit Observation

The loss category code table on the registry was examined.

Audit Commentary

Waipa keep the loss category table up to date and have not created any new loss category codes during the audit period. Compliance is confirmed.

5.2 Updating Loss Factors (Clause 22 of Schedule 11.1)

Audit Observation

The loss category code table on the registry was examined.

Audit Commentary

Waipa does not have any loss category codes with more than one loss factor. No loss factors have been changed since 1 July 2016, and this change was reviewed during the last audit. Compliance is confirmed.

6. Creation and Maintenance of NSPs

6.1 Creation and Decommissioning of NSPs (Clause 11.8 of Part 11 & Clause 25 of Schedule 11.1)

Audit Observation

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.2 Provision of NSP Information (Clauses 26(1) & (2) of Schedule 11.1)

Audit Observation

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period. There was one change to the NSP table.

Audit Commentary

The NSP table was reviewed. There was one change to an existing NSP. TMU0111 was updated to include I flow effective from 01/07/2016. The change was notified at least two months in advance of taking effect. Compliance is confirmed.

6.3 Notice of Balancing Areas (Clauses 24(1) & 26(3) of Schedule 11.1)

Audit Observation

The NSP table on the registry was examined. No new balancing areas were created during the audit period, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.4 Notice of Supporting Embedded Network NSP Information (Clause 26(4) of Schedule 11.1)

Audit Observation

The NSP table on the registry was examined. No NSPs were created or decommissioned during the audit period, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.5 Maintenance of Balancing Area Information (Clauses 24(2)& (3) of Schedule 11.1))

Audit Observation

The NSP table on the registry was examined. No balancing areas were changed during the audit period, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.6 Notice When an ICP Becomes an NSP (Clause 27 of Schedule 11.1)

Audit Observation

The NSP table on the registry was examined. Waipa has not had any ICPs that have changed to become an NSP during the audit period, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.7 Notification of the Transfer of ICPs (Clauses 1-4 of Schedule 11.2)

If the distributor wishes to transfer an ICP, the distributor must notify the market administrator in the prescribed form, no later than three business days before the transfer takes effect.

Audit Observation

Waipa has not acquired any networks, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.8 Responsibility for Metering Information for NSP that is not a POC to the Grid (Clause 10.25(1) of Part 10)

Audit Observation

Waipa has two NSPs that are points of connection to the grid, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.9 Responsibility for Metering Information when Creating an NSP that is not a POC to the Grid (Clause 10.25(1) of Part 10)

Audit Observation

The NSP table on the registry was examined. No NSPs were created during the audit period, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.10 Obligations Concerning Change in Network Owners (Clause 29 of Schedule 11.1)

Audit Observation

Waipa has not acquired any networks, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.11 Electrically Connecting NSP that is not a POC to the Grid (Clause 10.30(1) of Part 10)

Audit Observation

Waipa has two NSPs that are points of connection to the grid, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.12 Change of MEP Embedded Network Gate Meter (Clause 10.22(1)(b) of Part 10)

Audit Observation

Waipa has one embedded network (Oaklands) connected to their network. There have been no MEP changes during the audit period.

Audit Commentary

N/A

6.13 Confirmation of Consent for Transfer of ICPs (Clauses 5 & 8 of Schedule 11.2)

Audit Observation

Waipa has not acquired any networks, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

6.14 Transfer of ICPs- Embedded Network (Clauses 6 of Schedule 11.2)

Audit Observation

A registry list was examined and confirmed that no ICPs have transferred to an embedded network during the audit period.

Audit Commentary

N/A

7. Maintenance of Shared Unmetered load

7.1 Notification of Shared Unmetered Load ICP list (Clause 11.14(2) & (4) of Part 11)

Audit Observation

The list file was examined and confirmed that Waipa has no shared unmetered load connected.

Audit Commentary

Waipa does not intend to allow any new shared unmetered load connections. Review of a registry list confirmed there is no shared unmetered load connected to any Waipa ICP.

7.2 Changes to Shared Unmetered Load (Clause 11.14(5) of Part 11)

Audit Observation

As detailed in Section 7.1 above, Waipa have no shared unmetered load connections on their network, therefore this was not assessed as part of this audit.

Audit Commentary

N/A

8. Calculation of Loss Factors

8.1 Creation of Loss Factors

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Part 11 is:

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

Audit Observation

The “Guidelines on the calculation and the use of loss factors for reconciliation purposes v2.1” is still under review by the Loss Factor Review Panel. The calculation of loss factors was reviewed.

Audit Commentary

The loss factor table was examined. There have been no changes to loss factors since 01 July 2016, and this change was reviewed during the last audit.

Waipa reviews loss factors annually, and provided information on their methodology to calculate loss factors, and their latest loss factor review calculations.

For large industrial users, loss factors are calculated based on usage and the impedance of the dedicated feeders used to supply them. Loss factors for 11kV TOU customers are estimated.

To calculate 400V loss factors, Waipa subtracts the loss adjusted energy volumes for industrial and 11kV customers from the total injected at the GXP. This gives the total loss adjusted volume for the 400V group. This is compared to the volume sold to these customers, to determine the loss factor.

Waipa uses a four year average to calculate its loss factors to reduce volatility.

I reviewed the 2017 calculations and confirmed that they followed this methodology, and that the current loss factors recorded in the loss factor table match the 2017 calculations for all Waipa loss codes. I note that the 400V loss factor has been decreasing over time as more smart meters are deployed.

Unaccounted for Energy for the year to date, and the differences between GXP volumes and units sold from retailer data are reported to Waipa’s board monthly. A summary of this information was provided, and found to be consistent with the loss factors calculated.

As the guideline is still under review, this clause is assessed under the requirement to provide complete and accurate information. Compliance is confirmed.

Conclusions

The audit found six non-compliance issues and makes three recommendations. Waipa have improved their compliance following the 2016 audit. Improvements have been seen in addressing, initial energisation dates, and recording of unmetered load, but some non-compliance still exists in these areas.

I found many of the non-compliances relating to timeliness were due to corrections. If corrections were identified more quickly, compliance with data accuracy and timeliness requirements would improve. I recommend adding further checks to enable incorrect or missing data to be identified and corrected promptly.

The tables below set out in detail the audit findings:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Timeliness of ICP creation	3.2	11.5(3) of Part 11	ICP 0000293841WA99B was created on the registry four business days after the request was received.	Strong	Low	1	Investigating
Timeliness of initial energisation date population	3.5	7(2A) of Schedule 11.1	44 ICPs had their initial energisation date populated on the registry more than 10 business days after the initial energisation date.	Moderate	Low	2	Identified
Timeliness of registry updates	4.1	8 of schedule 11.1	Some updates to the registry were made more than three business days after the event date.	Moderate	Low	2	Identified
Incorrect NSP information	4.2	Clause 7(5) & 8(4) of Schedule 11.1	Eight ICPs were mapped to an incorrect NSP.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Incomplete or duplicate address information	4.4	2 & 7 (1)(a) of schedule 11.1	65 duplicate addresses. 64 addresses that do not have street numbers or property name information to allow the ICP to be readily located.	Moderate	Low	2	Identified
Incomplete unmetered load information	4.6	7(1) of Schedule 11.1	<ul style="list-style-type: none"> Some distributed generation details were not correctly recorded on the registry. Five ICPs had a registry effective date which did not match the installation paperwork, and two ICPs had registry generation capacity which did not match the installation paperwork. Unmetered load was not recorded on the registry for three active ICPs where the unmetered load details are known. <p>Five initial energisation dates were not correctly recorded on the registry. Four ICPs which were active prior to the audit period did not have an initial energisation date populated.</p>	Moderate	Low	2	Investigating
Breach Risk Rating Score						11	
Indicative Next Audit Frequency						12 months	

Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(1) of part 11	<p>Add the following items to the fortnightly review to improve compliance:</p> <ul style="list-style-type: none"> • NSP match • Active status with no initial energisation date • UNM flag = Y on the registry with no distributor unmetered details • Unmetered tariff in magiQ with no distributor unmetered details populated on the registry <p>Review address details on the registry quarterly:</p> <ul style="list-style-type: none"> • Investigate any ICPs with duplicate addresses • Investigate any ICPs missing address components (e.g. where unit, number and property name are all blank, or where street number and name are blank) to ensure that address information is sufficient to correctly identify the location. 	Identified
NSP information	4.2	8(4) of schedule 11.1 & 11.2 of part 11	Include a check of NSP alignment between NCS and the registry as part of the registry discrepancy process	Identified
Unmetered load	4.6	7(1)(m) of schedule 11.1.	Populate unmetered load format, as recommended by the EA, where possible and confirm which load is correct for the twelve ICPs where there is a variance.	Identified

Signed by:

A handwritten signature in dark ink, appearing to read 'T. Gannon'.

Tara Gannon – Veritek Limited
Electricity Authority Approved Auditor

Signed by:

A handwritten signature in blue ink, appearing to read 'K. Watson'.

Kerry Watson
Customer Services Manager

9. Waipa's Response

Waipa has reviewed this report. Their comments are contained in the body of the report.