

**ELECTRICITY INDUSTRY PARTICIPATION CODE  
DISTRIBUTOR AUDIT REPORT**

For

**Network Waitaki Limited**



Prepared by: Rebecca Elliot

Date audit commenced: 28 April 2020

Date audit report completed: 6 May 2020

Audit report due date: 22-May-20

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## EXECUTIVE SUMMARY

This Distributor audit was performed at the request of Network Waitaki 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 remotely using Zoom on April 28<sup>th</sup>, 2020 due to the nationwide lockdown in response to the COVID-19 pandemic.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority.

This audit found six non-compliances and makes no recommendations.

The main issue to address is that the balancing areas need to be reviewed as there are ICPs that are seasonally moved between GXPs which are in different balancing areas.

Network Waitaki has improved its data discrepancy reporting during the audit period which has led to a decrease in the volume of data inaccuracies and late registry updates.

Network Waitaki has reviewed and updated the streetlighting connection process in consultation with the Waitaki District Council to include a trader approval step.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The table below provides some guidance on this matter and contains a future risk rating score of seven, which results in an indicative audit frequency of 18 months. I agree with this recommendation.

The matters raised are shown in the tables below:

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Complete and accurate information	2.1	11.2(1)	Some event dates, IECDs and registry information not complete and accurate.	Strong	Low	1	Identified
Changes to registry information	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.  Six NSP changes updated later than 8 business days.  Some incorrect event dates.	Strong	Low	1	Identified
NSP accuracy	4.2	7(1),(4) and (5) Schedule 11.1	Two ICPs with incorrect NSPs.	Strong	Low	1	Identified
ICP location address	4.4	2 Schedule 11.1	One ICP with insufficient address information.	Strong	Low	1	Cleared
Registry accuracy	4.6	7(1)(k)&(p) of Schedule 11.1	Incorrect registry information for two DG ICPs.  1 missing IECD.  1 incorrect IECD.  3 ICPs with unmetered load discrepancies.	Strong	Low	1	Identified
Notice of balancing areas	6.3	24(1) and Clause 26(3) Schedule 11.1	ICPs are moved between two balancing areas.	Moderate	Low	2	Identified
Future Risk Rating						7	
Indicative Audit Frequency						18 months	

Future risk rating	0-1	2-5	6-8	9-20	21-29	30+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

## RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

## ISSUES

Subject	Section	Recommendation	Description
		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

I checked the Authority's website to identify any exemptions in place.

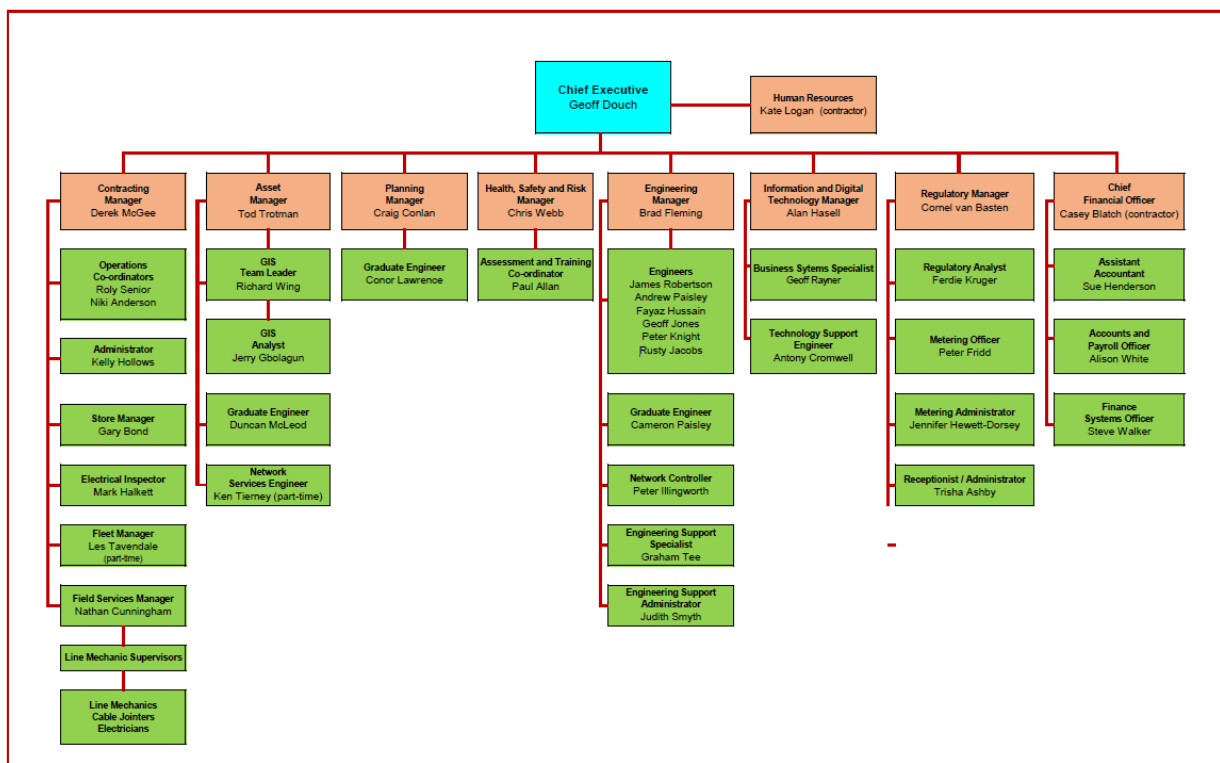
#### Audit commentary

Network Waitaki has no exemptions in place that are relevant to the scope of this audit.

### 1.2. Structure of Organisation

Network Waitaki Organisation Chart

April 2020



### 1.3. Persons involved in this audit

Auditor:

**Rebecca Elliot**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Supporting Auditor:

**Brett Piskulic**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Network Waitaki personnel assisting in this audit were:

Name	Title
Peter Fridd	Metering Manager
Steve Walker	Finance Systems Officer
Jennifer Dorsey	Metering Administrator
Cornel Van Basten	Regulatory Manager

### 1.4. Use of contractors (Clause 11.2A)

#### Code reference

*Clause 11.2A*

#### Code related audit information

*A participant who uses a contractor*

- *remains responsible for the contractor's fulfilment of the participants Code obligations*
- *cannot assert that it is not responsible or liable for the obligation due to the action of a contractor*
- *must ensure that the contractor has at least the specified level of skill, expertise, experience, or qualification that the participant would be required to have if it were performing the obligation itself.*

#### Audit observation

Network Waitaki subcontracts contractors to conduct connection and electrical connection activities on their network for approximately 5% of the new connections completed. This matter was discussed during the audit to ensure Network Waitaki understands their responsibilities under this clause.

#### Audit commentary

Network Waitaki has maintained responsibility for all of their obligations during the audit period. Compliance is confirmed.

### 1.5. Supplier list

The list of contractors is shown below:

- Calcut Electrical - Callum Reid – Kurow
- Altitude Electrical - Kerry Wilson – Twizel
- Plunket Electrical - Oamaru
- Kevin Peterson
- Winders Electrical.

For most new connections there is one visit with the contractor conducting connection, electrical connection and metering functions.

### 1.6. Hardware and Software

Network Waitaki use a SQL database and Content Management Server.

Data storage is cloud hosted so all data is backed up live and can be restored in the event of a failure of local systems. This is managed by Computer Concepts Limited in Christchurch.

### 1.7. Breaches or Breach Allegations

Network Waitaki has no breach allegations recorded by the Electricity Authority, which are relevant to this audit.

### 1.8. ICP and NSP Data

The table below lists the relevant NSPs and their associated balancing areas.

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of Active ICPs
WATA	OAM0331	OAMARU		WATA	OAM0331WATAG	G	01-01-17	10,846
WATA	TWZ0331	TWIZEL		WATA	WTKIVLYWATAG	G	01-05-08	646
WATA	WTK0111	WAITAKI		WATA	WTKIVLYWATAG	G	13-11-15	1,595
WATA	WTK0331	WAITAKI		WATA	WTKIVLYWATAG	G	01-05-08	2

Network Waitaki provided a list of all ICPs as at February 2020 by way of a registry “list file”. A summary of this data by “ICP status” is as follows.

Status	Number of ICPs (2020)	Number of ICPs (2019)
Distributor	0	0
New	1	0
Ready	9	11

Active	13,089	12,976
Inactive - new connection in progress (1,12)	8	14
Inactive – vacant (1,4)	243	238
Inactive – AMI remote disconnection (1,7)	22	19
Inactive – electrically disconnected due to meter disconnected (1,8)	2	1
Inactive – at pole fuse (1,9)	1	1
Inactive – electrically disconnected at meter box switch (1,10)	0	0
Inactive - at meter box switch (1,11)	0	0
Inactive – ready for decommissioning (1,6)	0	1
Decommissioned (3)	1,232	1,176

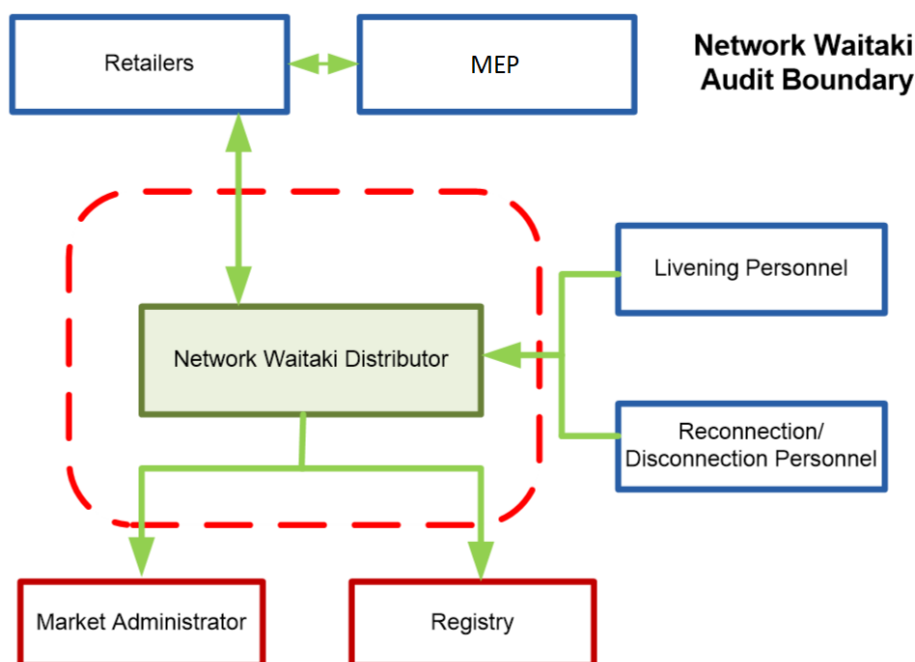
#### 1.9. Authorisation Received

A letter of authorisation was not required or sought. Network Waitaki was able to provide all necessary information.

### 1.10. Scope of Audit

This Distributor audit was performed at the request of Network Waitaki 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 remotely using Zoom on April 28<sup>th</sup>, 2020 due to the nationwide lockdown in response to the COVID-19 pandemic.

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



The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority.

### 1.11. Summary of previous audit

Network Waitaki provided a copy of their previous audit, conducted in March 2019 by Steve Woods of Veritek Ltd.

The findings of the previous audit are shown in the tables below:

#### Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Complete and accurate information	2.1	11.2(1)	Some event dates and IECs not complete and accurate.	Still existing
Provision of ICP information	3.4	7(2) of Schedule 11.1	Ready status updated after trading for ICP 0000460513WTA82.	Cleared

Subject	Section	Clause	Non-compliance	Status
Population of IED	3.5	7(2A) of Schedule 11.1	10 late initial energisation date updates.	Cleared
Changes to registry information	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Still existing
NSP accuracy	4.2	7(1),(4) and (5) Schedule 11.1	Two ICPs with incorrect NSPs.	Still existing
Registry accuracy	4.6	7(1)(k)&(p) of Schedule 11.1	Incorrect registry information for one DG ICP. 80 missing IECDs. 15 incorrect IECDs.	Still existing

## Table of Recommendations

Subject	Section	Clause	Recommendation for improvement	Status
Electrical connection of streetlight circuits	3.16	10.33A	Review streetlight circuit connection process to ensure that these are associated with an ICP prior to electrical connection.	Cleared
Registry accuracy	4.6	7(1)(o) of Schedule 11.1	Create fields for distributed generation in the database.	Cleared
Registry accuracy	4.6	7(1)(o) of schedule 11.1.	Check 7 ICPs to confirm DG is definitely installed.	Cleared
Balancing areas	6.3	24(1) and Clause 26(3) Schedule 11.1	Check whether there should be only one balancing area rather than two.	Still existing

## 2. OPERATIONAL INFRASTRUCTURE

### 2.1. Requirement to provide complete and accurate information (Clause 11.2(1))

#### Code reference

*Clause 11.2(1)*

#### Code related audit information

*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

Network Waitaki's data management processes were examined. The list file as at February 2020 was examined to confirm compliance.

#### Audit commentary

Network Waitaki has processes in place to ensure that information is complete and accurate and is not misleading or deceptive. Examination of the list file found examples of some information that was not complete and accurate. Specific examples are:

- some incorrect event dates for registry updates,
- one incorrect IECD,
- one missing IECD,
- incorrect registry information for two DG ICPs, and
- one ICP with insufficient address information.

Network Waitaki has improved its discrepancy reporting which has reduced the volume of inaccuracies.

#### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 11.2(1)  From: 01-Sep-17 To: 28-Apr-20	Some event dates, IECDs and registry information not complete and accurate.  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Strong  Breach risk rating: 1

Audit risk rating	Rationale for audit risk rating		
Low	<p>I have recorded the controls as strong in this area as Network Waitaki has checks in place to identify and resolve discrepancies and the number of inaccuracies is low.</p> <p>There is a minor impact on participants due to inaccuracies. The audit risk rating is low.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
NWL undertook to have a discrepancy report built to check for inaccuracies. This was undertaken halfway through the last audit period to resolve this problem.		5/5/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Reports are run both daily & weekly to pick up any errors. This approach has shown to be successful.		5/5/2020	

## 2.2. Requirement to correct errors (Clause 11.2(2))

### Code reference

Clause 11.2(2)

### Code related audit information

*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

Network Waitaki's data management processes were examined. The list file as at February 2020 was examined to confirm compliance.

### Audit commentary

Network Waitaki has a comprehensive suite of discrepancy reports in place. These are managed on a regular basis to ensure that information is complete and accurate and is not misleading or deceptive. Any incorrect data is corrected upon discovery. I did not identify any examples where errors were not corrected as soon as practicable.

### Audit outcome

Compliant

### 3. CREATION OF ICPS

#### 3.1. Distributors must create ICPs (Clause 11.4)

##### Code reference

*Clause 11.4*

##### Code related audit information

*The distributor must create an ICP identifier in accordance with Clause 1 of Schedule 11.1 for each ICP on the distributor's network. This includes an ICP identifier for the point of connection at which an embedded network connects to the distributor's network.*

##### Audit observation

The new connection process was examined in detail and is described in **section 3.2** below. 20 new connection applications of the 174 created during the audit period 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.

##### Audit outcome

Compliant

#### 3.2. Participants may request distributors to create ICPs (Clause 11.5(3))

##### Code reference

*Clause 11.5(3)*

##### Code related audit information

*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. 20 new connection applications of the 174 created during the audit period were checked from the point of application through to when the ICP was created. These were selected using the typical characteristic methodology to confirm the process and controls worked in practice.

##### Audit commentary

Network Waitaki's new connection process contains the following steps:

- an application is made directly to Network Waitaki from the customer or their agent (electrician) and this application can be made on-line,
- this application contains the proposed retailer and the contractor,
- the application is allocated to an engineer for approval,
- if payment is required a quotation is sent to the customer,
- once payment is made the approved application is provided to Metering and Connections,
- Metering and Connections creates the ICP at "Ready",

- the New Connections fact sheet containing all customer, ICP, Electrical Contractor details and the livening Inspector is provided to the retailer for approval, and
- some retailers send approval to liven but most just give a works order to AMS for the metering which WATA considers to be the trader's acceptance.

The records for 20 ICPs were examined. All 20 ICPS were created on the day the request was received.

#### **Audit outcome**

Compliant

### **3.3. Provision of ICP Information to the registry (Clause 11.7)**

#### **Code reference**

*Clause 11.7*

#### **Code related audit information**

*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.

In this section I have examined the process for populating the registry, and the controls to ensure information is complete.

The accuracy of information is discussed in **section 4.6**.

#### **Audit commentary**

The registry is populated manually and there is peer review between the two operators to ensure information is accurate. There is also a set of validation reports run monthly to identify errors.

#### **Audit outcome**

Compliant

### **3.4. Timeliness of Provision of ICP Information to the registry (Clause 7(2) of Schedule 11.1)**

#### **Code reference**

*Clause 7(2) of Schedule 11.1*

#### **Code related audit information**

*The distributor must provide information specified in Clauses 7(1)(a) to 7(1)(o) of Schedule 11.1 as soon as practicable and prior to electricity being traded at the ICP.*

#### **Audit observation**

The audit compliance reports for the period 1/01/19 to 29/02/20 were checked to determine the timeliness of the provision of ICP information for WATA's new connections.

#### **Audit commentary**

All new connections were updated to "Ready" prior to trading.

## Audit outcome

Compliant

### 3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1)

#### Code reference

*Clause 7(2A) of Schedule 11.1*

#### Code related audit information

*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 electrically connected.*

#### Audit observation

The audit compliance reports for the period 1/01/19 to 29/02/20 and event detail report for 01/01/19 to 29/02/20 were checked to determine the timeliness of the provision of ICP information for WATA's new connections.

#### Audit commentary

There is a requirement to populate the initial electrical date within 10 business days of physical electrical connection. There were 180 initial electrical connection date updates in the event detail report, all of these were updated within 10 business days. WATA has added the IECD field to its data discrepancy reporting since the last audit which has led to the improvement in this area.

## Audit outcome

Compliant

### 3.6. Connection of ICPs (Clause 11.17)

#### Code reference

*Clause 11.17*

#### Code related audit information

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

*The distributor must not 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 connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load, and all traders that are responsible for an ICP on the shared unmetered load have been advised.*

#### Audit observation

The new connection process was examined in **section 3.2**.

The registry list as at 29/02/20 and event detail report for 01/01/19 to 29/02/20 were examined to determine compliance.

#### Audit commentary

The new connections process was examined, and the process includes a "trader responsibility" step.

All ICPs that were electrically connected had a proposed trader recorded in the registry as having accepted responsibility.

### Audit outcome

Compliant

### 3.7. Electrical connection of ICP that is not an NSP (Clause 10.31)

#### Code reference

*Clause 10.31*

#### Code related audit information

*A distributor must not connect an ICP that is not an NSP unless requested to do so by the trader trading at the ICP, or if there is only shared unmetered load at the ICP and each trader has been advised.*

#### Audit observation

The new connection process was examined. The event detail report for the period 01/01/19 to 29/02/20 was examined.

#### Audit commentary

ICPs will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. Trader acceptance is confirmed during the application process.

Review of the registry list confirmed that a trader is currently recorded for all active ICPs.

### Audit outcome

Compliant

### 3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)

#### Code reference

*Clause 10.31A*

#### Code related audit information

*A distributor may only temporarily electrically connect an ICP that is not an NSP if requested by an MEP for a purpose set out in clause 10.31A(2), and the MEP:*

- *has been authorised to make the request by the trader responsible for the ICP; and*
- *the MEP has an arrangement with that trader to provide metering services.*

*If the ICP is only shared unmetered load, the distributor must advise the traders of the intention to temporarily connect the ICP unless:*

*advising all traders would impose a material cost on the distributor, and  
in the distributor's reasonable opinion the advice would not result in any material benefit to any of the traders.*

#### Audit observation

The new connection process was examined in **sections 3.1 and 3.2.**

The event detail file and registry list were examined to determine compliance.

#### Audit commentary

No temporarily electrically connected ICPs were identified. The Network Waitaki process does not permit temporary electrical connection of ICPs.

### Audit outcome

Compliant

## 3.9. Connection of NSP that is not a point of connection to the grid (Clause 10.30)

### Code reference

*Clause 10.30(2)*

### Code related audit information

*A distributor must not connect an NSP on its network that is not a point of connection to the grid unless requested to do so by the reconciliation participant responsible for ensuring there is a metering installation for the point of connection.*

*The distributor must, within five business days of connecting the NSP that is not a point of connection to the grid, advise the reconciliation manager of the following in the prescribed form:*

- *the NSP that has been connected*
- *the date of the connection*
- *the participant identifier of the MEP for each metering installation for the NSP*
- *the certification expiry date of each metering installation for the NSP.*

### Audit observation

Network Waitaki has not created any new NSPs during the audit period.

### Audit commentary

Network Waitaki has not created any new NSPs during the audit period.

### Audit outcome

Not applicable

## 3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A))

### Code reference

*Clause 10.30(A)*

### Code related audit information

*A distributor may only temporarily electrically connect an NSP that is not a point of connection to the grid if requested by an MEP for a purpose set out in clause 10.30A(3), and the MEP:*

- *has been authorised to make the request by the reconciliation participant responsible for the NSP; and*
- *the MEP has an arrangement with that reconciliation participant to provide metering services.*

### Audit observation

The NSP table was reviewed.

### Audit commentary

No new NSPs that are not points of connection to the grid were connected during the audit period.

### Audit outcome

Compliant

### 3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1)

#### Code reference

*Clause 1(1) Schedule 11.1*

#### Code related audit information

*Each ICP created by the distributor in accordance with Clause 11.4 must have a unique identifier, called the “ICP identifier”, determined in accordance with the following format:*

*xxxxxxxxxxxccc where:*

- *xxxxxxxxxx is a numerical sequence provided by the distributor*
- *xx is a code that ensures the ICP is unique (assigned by the Authority to the issuing distributor)*
- *ccc is a checksum generated according to the algorithm provided by the market administrator.*

#### Audit observation

The new connection process was examined and a sample of 20 new connections were checked.

#### Audit commentary

All ICPs are created in the appropriate format. The sample checked confirmed compliance.

#### Audit outcome

Compliant

### 3.12. Loss category (Clause 6 Schedule 11.1)

#### Code reference

*Clause 6 Schedule 11.1*

#### Code related audit information

*Each ICP must have a single loss category that is referenced to identify the associated loss factors.*

#### Audit observation

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

#### Audit commentary

Each ICP only has a single loss category, which clearly identifies the relevant loss factor.

#### Audit outcome

Compliant

### 3.13. Management of “new” status (Clause 13 Schedule 11.1)

#### Code reference

*Clause 13 Schedule 11.1*

#### Code related audit information

*The ICP status of “New” must be managed by the distributor to indicate:*

- *the associated electrical installations are in the construction phase (Clause 13(a) of Schedule 11.1)*
- *the ICP is not ready for activation (Clause 13(b) 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 01/01/19 to 29/02/20 were examined in relation to the use of the “New” status. I also checked for ICPs at the “New” status with an initial electrical connection date populated.

### Audit commentary

The “New” status is not normally used. Two ICPs were created at “New” during the audit period. One was due to a retailer not being nominated. The second was created in error for a wrong address, and as there will be a new connection required at this address in the near future this ICP has been left at “New” and will be monitored. Network Waitaki correctly uses the “New” status.

### Audit outcome

Compliant

## 3.14. Monitoring of “new” & “ready” statuses (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 has had the status of “Ready” for 24 calendar months or more:*

- *the distributor must ask the trader who intends to trade at the ICP whether the ICP should continue to have that status (Clause 15(2)(a) of Schedule 11.1)*
- *the distributor must decommission the ICP if the trader advises that the ICP should not continue to have that status (Clause 15(2)(b) of Schedule 11.1).*

### Audit observation

I checked the list file for ICPs at “New” or “Ready” for longer than 24 months to confirm that traders had been notified.

### Audit commentary

Network Waitaki checks on any ICPs at “New” or “Ready” every two weeks and communicates with the relevant parties to confirm if the connection is still required or not. There is one ICP at “Ready” for longer than 24 months this has been confirmed as still required.

### Audit outcome

Compliant

## 3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1)

### Code reference

*Clause 7(6) Schedule 11.1*

### Code related audit information

*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**

There are no embedded generators with a capacity greater than 10MW that require specific loss category codes. There has been no new embedded generation greater than 10MW created during the audit period.

#### **Audit outcome**

Compliant

### **3.16. Electrical connection of a point of connection (Clause 10.33A)**

#### **Code reference**

*Clause 10.33A*

#### **Code related audit information**

- (1) A reconciliation participant may electrically connect a point of connection, or authorise the electrical connection of a point of connection, only if—*
  - (a) the reconciliation participant is recorded in the registry as being responsible for the ICP; and*
  - (b) one or more certified metering installations are in place at the ICP in accordance with this Part; and*
  - (c) in the case of an ICP that has not previously been electrically connected, the owner of the network to which the point of connection is connected has given written approval of the electrical connection.*
- (2) A reconciliation participant described in subclause (1)(a)—*
  - (a) may authorise the electrical connection of an ICP if—*
    - (i) a metering installation is in place at the ICP; and*
    - (ii) the metering installation is operational but not certified; and*
    - (iii) the reconciliation participant arranges for the certification of the metering installation to be completed within five business days of the ICP being electrically connected;*
  - (b) may electrically connect an ICP if the point of connection is solely for unmetered load.*
- (3) A reconciliation participant must not authorise the electrical connection of a point of connection in either of the following circumstances:*
  - (a) a distributor has electrically disconnected the point of connection for safety reasons, and has not subsequently approved the electrical connection of the point of connection;*
  - (b) electrically connecting the point of connection would breach the Electricity (Safety) Regulations 2010.*
- (4) No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant in the circumstances described in sub-clause (1), (2), or (3).*

#### **Audit observation**

Sub-clause (4) states that no participant may electrically connect a point of connection without the permission of the Reconciliation Participant. The electrical connection of street light circuits which are a point of connection was examined.

### **Audit commentary**

In the previous audit it was recommended that the new connections process for streetlighting circuits be reviewed to ensure Network Waitaki is not electrically connecting them without approval from the trader.

Network Waitaki has reviewed and updated the streetlighting connection process in consultation with the Waitaki District Council. Prior to connection of a new streetlight circuit the contractor submits an application form to Network Waitaki detailing the planned addition. Network Waitaki approves the application and sends it to the retailer requesting approval to connect. Once the retailer approval is received the connection is authorised and completed by Network Waitaki. I checked the documentation and emails for two new streetlight circuits to confirm the process had been followed. In both cases approval had been provided by the retailer prior to the electrical connection.

### **Audit outcome**

Compliant

## 4. MAINTENANCE OF REGISTRY INFORMATION

### 4.1. Changes to registry information (Clause 8 Schedule 11.1)

#### Code reference

*Clause 8 Schedule 11.1*

#### Code related audit information

*If information held by the registry that relates to an ICP for which the distributor is responsible changes, the distributor must provide notice to the registry of that change.*

*Notification must be given by the distributor within three business days after the change takes 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 10 business days, the notification must be provided no later than the 13<sup>th</sup> business day and be backdated to the date the change took effect.*

*In the case of decommissioning an ICP, notification must be given by the later of 3 business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or 3 business days after the distributor has decommissioned the ICP. .*

#### Audit observation

The process to manage ICP changes was examined, with the audit compliance reports for the period 1/01/19 to 29/02/20 and event detail report for 01/01/18 to 29/02/20. The management of NSP changes was examined.

#### Audit commentary

Network Waitaki updates the registry directly. Their IT platform does not populate the registry.

#### Pricing events

The audit compliance report identified 15 late price code updates out of a total of 2,345 updates, 99.5% were on time. Analysis of these events showed that two were one day late and one was two days late. The remainder appeared to be late as an incorrect event date had been entered. Ten of these had been entered in January and February of 2019 with the year incorrectly recorded as 2018. One had the month and day transposed and one had not had an event date populated so defaulted to the date of the previous event.

#### Decommissioning status events

The audit compliance report identified five late status updates to decommissioned out of a total of 45 updates, 88.9% were on time. Decommissioned ICPs were added to Network Waitaki's daily and weekly discrepancy reports in June 2019, there have been no late status updates since then.

#### Network events

The network events evaluated excluded those relating to the population of the initial electrical connection dates (discussed in **section 3.5**), NSP changes (discussed below) and the initial network events relating to the creation of ICPs.

The network event compliance report was examined and recorded 54 late network updates. This was reviewed and found only four valid late network updates that didn't relate to the events detailed above. These were checked and found:

- two of these removed the proposed trader post the electrical connection date,
- the IECN was removed for one ICP, this was re-entered on the same date with the correct event date, and
- the unmetered load was added to ICP 0000488820WT4CF as part of the Chorus clean-up project being undertaken by the trader.

I am unable to determine the compliance percentage but given the very small volume of genuine late network events compliance is expected to be high.

### NSP Changes

The process of NSP changes was examined. Network Waitaki advised that the Duntroon substation (approx. 350 ICPs) is fed from OAM0330 or WTK0111 depending on the time of year. The ICPs are moved between the two NSPs twice each year.

The audit compliance report identified six NSP changes updated later than eight business days.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: Clause 8 Schedule 11.1  From: 01-Jan-18 To: 29-Feb-20	Records updated on the registry later than 3 business days after event. Six NSP changes updated later than 8 business days. Some incorrect event dates. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	I have recorded the controls as strong in this area as Network Waitaki has checks in place to identify and resolve discrepancies and the number of late updates was low. There is a minor impact on participants with late updates. The Audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
<a href="#">NWL's Discrepancy Report built halfway through the audit period will pick up all future data discrepancies</a>		5/5/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<a href="#">Run Discrepancy Report daily and weekly to enable mistakes to be picked up and corrected in a timely manner.</a>		5/5/2020	

### 4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)

### Code reference

#### Clauses 7(1),(4) and (5) Schedule 11.1

#### Code related audit information

*The distributor must notify the registry of the NSP identifier of the NSP to which the ICP is usually connected under Clause 7(1)(b) of Schedule 11.1.*

*If the distributor cannot identify the NSP that an ICP is connected to, the distributor must nominate the NSP that the distributor thinks is most likely to be connected to the ICP, taking into account the flow of electricity within its network, and the ICP is deemed to be connected to the nominated NSP.*

#### Audit observation

The accuracy of NSP information was checked using the audit compliance reports for the period 1/01/19 to 29/02/20.

#### Audit commentary

Network Waitaki records the transformer number on the application form. This maps back to the NSP for each ICP in the Network Waitaki database.

The audit compliance report identified two ICPs where the incorrect NSP was recorded in the registry. Both had WTK0331 and should have TWZ0331.

#### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.2 With: Clauses 7(1),(4) and (5) Schedule 11.1  From: 20-Aug-19 To: 28-Apr-20	Two ICPs with incorrect NSPs.  Potential impact: Low  Actual impact: Low  Audit history: Once  Controls: Strong  Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	The controls are recorded as strong because they mitigate risk to an acceptable level.  The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
NWL's Discrepancy Report built halfway through the audit period will pick up all future data discrepancies		5/5/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Run Discrepancy Report daily and weekly to ensure any mistakes are caught and corrected.		5/5/2020	

#### 4.3. Customer queries about ICP (Clause 11.31)

##### Code reference

Clause 11.31

##### Code related audit information

*The distributor must advise a customer (or any person authorised by the customer) or embedded generator of the customer or embedded generator's ICP identifier within three business days after receiving a request for that information.*

##### Audit observation

The management of customer queries was discussed to confirm policy.

##### Audit commentary

Requests for ICP identifiers are not a common occurrence, however Network Waitaki provides this information if the requesting party has authorisation.

##### Audit outcome

Compliant

#### 4.4. ICP location address (Clause 2 Schedule 11.1)

##### Code reference

Clause 2 Schedule 11.1

##### Code related audit information

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

##### Audit observation

I checked the audit compliance reports for the period from 01/01/19 to 29/02/20 to identify any ICPS with insufficient address information or duplicate addresses.

##### Audit commentary

The audit compliance report identified one ICP with insufficient address information. ICP 0000352010WT420 had the street number recorded in the "Street" field in error and no street name recorded. This had been corrected at the time of the audit. All other addresses have sufficient information to allow the ICPS to be located. There were no duplicate addresses.

##### Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 4.4 With: Clause 2 Schedule 11.1  From: 01-Jan-19 To: 15-Apr-20	One ICP with insufficient address information.  Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
<b>Audit risk rating</b>	<b>Rationale for audit risk rating</b>		
<b>Low</b>	The controls are recorded as strong because they mitigate risk to an acceptable level.  The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
<b>Actions taken to resolve the issue</b>		<b>Completion date</b>	<b>Remedial action status</b>
NWL's Discrepancy Report built halfway through the audit period will pick up all future data discrepancies. Although, the addresses in both cases were localized iconic destinations, easily recognizable and no further details were required, NWL did undertake to formalize the addresses to meet the audits requirements.		5/5/2020	Cleared
<b>Preventative actions taken to ensure no further issues will occur</b>		<b>Completion date</b>	
Run Discrepancy Report daily and weekly to ensure any mistakes are caught and corrected.		5/5/2020	

#### 4.5. Electrically disconnecting an ICP (Clause 3 Schedule 11.1)

##### Code reference

Clause 3 Schedule 11.1

##### Code related audit information

*Each ICP created after 7 October 2002 must be able to be electrically disconnected without electrically disconnecting another ICP, except for ICPs that are the point of connection between a network and an embedded network, or ICPs that represent the consumption calculated by the difference between the total consumption for the embedded network and all other ICPs on the embedded network.*

##### Audit observation

I checked Network Waitaki's policy and documentation in relation to this clause.

##### Audit commentary

Network Waitaki has some historic shared service mains. If any of these are found separate fusing is installed to address this. None have been found during the audit period.

Network Waitaki's new connections process contains a step that ensures there any ICP can be electrically disconnected without disconnecting any other ICP.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 7(1) Schedule 11.1*

##### Code related audit information

*For each ICP on the distributor's network, the distributor must provide the following information to the registry:*

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
  - a) *the unique loss category code assigned to the ICP*
  - b) *the ICP identifier of the ICP*
  - c) *the NSP identifier of the NSP to which the ICP is connected*
  - d) *the plant name of the embedded generating station*
- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*
- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
  - a) *a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
  - b) *a blank chargeable capacity if the capacity value can be determined for a billing period from metering information collected for that billing period*
  - c) *if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
    - (i) *no capacity value recorded in the registry field for the chargeable capacity; and*
    - (ii) *either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
  - d) *if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
    - (i) *the annual capacity value recorded in the registry field for the chargeable capacity; and*
    - (ii) *either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
  - e) *the actual chargeable capacity of the ICP in any other case*

- *the distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder distributor installation details only if the distributor is unable to assign the actual distributor installation details because the capacity or volume information required to assign the actual distributor installation details cannot be determined before electricity is traded at the ICP (Clause 7(1)(i) of Schedule 11.1)*
- *the participant identifier of the first trader who has entered into an arrangement to sell or purchase electricity at the ICP (only if the information is provided by the first trader) (Clause 7(1)(j) of Schedule 11.1)*
- *the status of the ICP (Clause 7(1)(k) of Schedule 11.1)*
- *designation of the ICP as "Dedicated" if the ICP is located in a balancing area that has more than 1 NSP located within it, and the ICP will be supplied only from the NSP advised under Clause 7(1)(b) of Schedule 11.1, or the ICP is a point of connection between a network and an embedded network (Clause 7(1)(l) of Schedule 11.1)*
- *if unmetered load, other than distributed unmetered load, is associated with the ICP, the type and capacity in kW of unmetered load (Clause 7(1)(m) of Schedule 11.1)*
- *if shared unmetered load is associated with the ICP, a list of the ICP identifiers of the ICPs that are associated with the unmetered load (Clause 7(1)(n) of Schedule 11.1)*
- *if the ICP is capable of generating into the distributors network (Clause 7(1)(o) of Schedule 11.1):*
  - a) *the nameplate capacity of the generator; and*
  - b) *the fuel type*
- *the initial electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).*

#### **Audit observation**

Network Waitaki updates the registry manually and the registry then populates Network Waitaki's database. Registry validation in place and discrepancy reports are generated daily and weekly for most registry fields. I checked all registry fields for obvious discrepancies using the audit compliance reports for the period from 01/01/19 to 29/02/20.

#### **Audit commentary**

All ICP information was checked and confirmed compliant unless discussed below:

#### **Distributed generation**

The distributed generation process was examined. Network Waitaki has an application process which requires a form to be submitted by the owner. A Network Waitaki engineer reviews the application and approval is issued. An inspection must be completed, and copies of all documentation is provided to Network Waitaki prior to connection.

The audit compliance report identified two ICPs with incorrectly recorded generation details as follows:

- ICP 0000268915WTB66 was recorded as installation type "L" with no generation capacity and fuel type following the installation of a 5kW Solar distributed generation system in August 2019, and
- ICP 0000418080WTB19 was recorded as installation type "L" with no generation capacity and fuel type following the installation of a 5kW Solar distributed generation system in November 2019.

The audit compliance report identified one ICP where the trader information was incorrect.

ICP 0000428531WT1C7 has an incorrect profile of RPS PV1 recorded where there is no generation installed. Whilst the meter is capable of recording generation there is no generation installed on site as this is a builder's temporary supply. The network has correctly recorded the installation type as "L".

#### **Initial electrical connection date**

The audit compliance report identified one ICP where the initial electrical connection date had not been populated. At the time of the audit the date had been populated.

The audit compliance report identified four ICPs where the initial electrical connection date was different to the active date or the certification date. In three of these cases Network Waitaki had provided the correct date, this was confirmed by checking the new connection sheets. In one case the date was incorrect, the date has now been corrected.

### Unmetered Load

Part 11 states the distributors must provide unmetered load type and capacity of the unmetered load to the registry "if known".

For the 72 active ICPs with unmetered load recorded by Network Waitaki, the Trader also has unmetered load details populated.

I checked the accuracy of the unmetered load details recorded by Network Waitaki against the trader's unmetered load details. There was a discrepancy between the load details recorded for three ICPs. The load matched for the remaining 69 ICPs. Network Waitaki have updated the registry for two of the ICPs to match the trader load details and are investigating and will consult with the trader regarding the third ICP.

### Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.6 With: Clause 7(1)(o) of Schedule 11.1 From: 22-Jan-19 To: 28-Apr-20	Incorrect registry information for two DG ICPs. 1 missing IECD. 1 incorrect IECD. 3 ICPs with unmetered load discrepancies. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
<b>Low</b>	I have recorded the controls as strong in this area as Network Waitaki has checks in place to identify and resolve discrepancies and the number of discrepancies was low. There is a minor impact on participants with late updates. The Audit risk rating is low.
Actions taken to resolve the issue	
Completion date	Remedial action status

Not sure why previous Audits have not picked this issue up before - as they have been in the Registry for several audits.  Since the last audit NWL has only had 1 unmetered load to populate in the Registry.  In the future, NWL will contact the Retailer for the outstanding UML details to mitigate this circumstance occurring.	30/6/2020	Identified
<b>Preventative actions taken to ensure no further issues will occur</b>	<b>Completion date</b>	
Check with the Retailer to ensure that the formula the Retailer has loaded into the Registry, matches the formula that NWL have been advised of on the application.	30/6/2020	

#### 4.7. Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)

##### Code reference

*Clause 7(3) Schedule 11.1*

##### Code related audit information

*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 audit compliance reports for the period 1/01/19 to 29/02/20 were checked to determine if any price codes were assigned later than 10 business days after trading commenced.

##### Audit commentary

There were no ICPs with price changes backdated more than 10 business days.

##### Audit outcome

Compliant

#### 4.8. GPS coordinates (Clause 7(8) and (9) Schedule 11.1)

##### Code reference

*Clause 7(8) and (9) Schedule 11.1*

##### Code related audit information

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

#### **Audit observation**

I checked the list file for ICPs with GPS coordinates recorded.

#### **Audit commentary**

GPS coordinates are not recorded.

#### **Audit outcome**

Not applicable

### **4.9. Management of “ready” status (Clause 14 Schedule 11.1)**

#### **Code reference**

*Clause 14 Schedule 11.1*

#### **Code related audit information**

*The ICP status of “Ready” must be managed by the distributor and indicates that:*

- *the associated electrical installations are ready for connecting to the electricity supply (Clause 14(1)(a) of Schedule 11.1); or*
- *the ICP is ready for activation by a trader (Clause 14(1)(b) of Schedule 11.1)*

*Before an ICP is given the "Ready" status in accordance with Clause 14(1) of Schedule 11.1, the distributor must:*

- *identify the trader that has taken responsibility for the ICP (Clause 14(2)(a) of Schedule 11.1)*
- *ensure the ICP has a single price category (Clause 14(2)(b) of Schedule 11.1).*

#### **Audit observation**

I examined the new connections process and reviewed the registry list file from 01/01/19 to 29/02/20 to identify that all ICPs at “ready” status had a nominated trader and a single price category recorded.

#### **Audit commentary**

The status of “Ready” is used once the ICP is ready for connection. The new connection process has a step to confirm the trader has taken responsibility. All ICPs only had a trader nominated and a single price category code.

#### **Audit outcome**

Compliant

### **4.10. Management of “distributor” status (Clause 16 Schedule 11.1)**

#### **Code reference**

*Clause 16 Schedule 11.1*

#### **Code related audit information**

*The ICP status of “distributor” must be managed by the distributor and indicates that the ICP record represents a shared unmetered load installation or the point of connection between an embedded network and its parent network.*

#### **Audit observation**

I checked the list file to confirm compliance.

#### **Audit commentary**

There are no ICPs with the distributor only status.

#### **Audit outcome**

Not applicable

### **4.11. Management of “decommissioned” status (Clause 20 Schedule 11.1)**

#### **Code reference**

*Clause 20 Schedule 11.1*

#### **Code related audit information**

*The ICP status of “decommissioned” must be managed by the distributor and indicates that the ICP is permanently removed from future switching and reconciliation processes (Clause 20(1) of Schedule 11.1).*

*Decommissioning only occurs when:*

- *electrical installations associated with the ICP are physically removed (Clause 20(2)(a) of Schedule 11.1); or*
- *there is a change in the allocation of electrical loads between ICPs with the effect of making the ICP obsolete (Clause 20(2)(b) of Schedule 11.1); or*
- *in the case of a distributor-only ICP for an embedded network, the embedded network no longer exists (Clause 20(2)(c) of Schedule 11.1).*

#### **Audit observation**

I examined the physical process for decommissioning ICPs along with the timeliness and accuracy of registry updates.

#### **Audit commentary**

Network Waitaki’s ICP decommissioning requests mostly come directly from the property owner. The property owner’s permission is gained in all instances. Once this has been gained Network Waitaki’s contractors will carry out the decommissioning. The trader is advised to change the ICP to “inactive-ready for decommissioning” once Network Waitaki has received confirmation from the contractor that the decommissioning has taken place. This includes confirmation that metering has been removed.

Decommissioned ICPs were added to Network Waitaki’s daily and weekly discrepancy reports in June 2019, there have been no late status updates since then. The timeliness of updates to decommissioned status are discussed in **section 4.1**.

#### **Audit outcome**

Compliant

### **4.12. Maintenance of price category codes (Clause 23 Schedule 11.1)**

#### **Code reference**

*Clause 23 Schedule 11.1*

#### **Code related audit information**

*The distributor must keep up to date the table in the registry of the price category codes that may be assigned to ICPs on each distributor’s network by entering in the table any new price category codes.*

*Each entry must specify the date on which each price category code takes effect, which must not be earlier than two months after the date the code is entered in the table.*

*A price category code takes effect on the specified date.*

**Audit observation**

I checked the price category code table for any new or changed codes during the audit period.

**Audit commentary**

There were no new codes created during the audit period.

**Audit outcome**

Compliant

## 5. CREATION AND MAINTENANCE OF LOSS FACTORS

### 5.1. Updating table of loss category codes (Clause 21 Schedule 11.1)

#### Code reference

*Clause 21 Schedule 11.1*

#### Code related audit information

*The distributor must keep the registry up to date with the loss category codes that may be assigned to ICPs on the distributor's network.*

*The distributor must specify the date on which each loss category code takes effect.*

*A loss category code takes effect on the specified date.*

#### Audit observation

I checked the loss category code table for any new codes during the audit period.

#### Audit commentary

There were no additional codes created during the audit period.

#### Audit outcome

Not applicable

### 5.2. Updating loss factors (Clause 22 Schedule 11.1)

#### Code reference

*Clause 22 Schedule 11.1*

#### Code related audit information

*Each loss category code must have a maximum of two loss factors per calendar month. Each loss factor must cover a range of trading periods within that month so that all trading periods have a single applicable loss factor.*

*If the distributor wishes to replace an existing loss factor on the table on the registry, the distributor must enter the replaced loss factor on the table in the registry.*

#### Audit observation

I checked the loss category code table for any changed factors during the audit period.

#### Audit commentary

Each ICP only has a single loss category, which clearly identifies the relevant loss factor.

There were no new codes or changes to loss factors during the audit period.

#### Audit outcome

Compliant

## 6. CREATION AND MAINTENANCE OF NSPS (INCLUDING DECOMMISSIONING OF NSPS AND TRANSFER OF ICPS)

### 6.1. Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)

#### Code reference

*Clause 11.8 and Clause 25 Schedule 11.1*

#### Code related audit information

*If the distributor is creating or decommissioning an NSP that is an interconnection point between two local networks, the distributor must notify the reconciliation manager of the creation or decommissioning.*

*If the embedded network owner is creating or decommissioning an NSP that is an interconnection point between two embedded networks, the embedded network owner must notify the reconciliation manager of the creation or decommissioning.*

*If the distributor is creating or decommissioning an NSP that is a point of connection between an embedded network and another network, the distributor must notify the reconciliation manager of the creation or decommissioning.*

*If the distributor wishes to change the record in the registry of an ICP that is not recorded as being usually connected to an NSP in the distributor's network, so that the ICP is recorded as being usually connected to an NSP in the distributor's network (a "transfer"), the distributor must:*

- notify the reconciliation manager*
- notify the market administrator*
- notify each affected reconciliation participant*
- comply with Schedule 11.2.*

#### 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

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

#### Audit outcome

Compliant

### 6.2. Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)

#### Code reference

*Clause 26(1) and (2) Schedule 11.1*

#### Code related audit information

*If the distributor wishes to create an NSP or transfer an ICP as described above, the distributor must request that the reconciliation manager create a unique NSP identifier for the relevant NSP.*

*The request must be made at least 10 business days before the NSP is electrically connected, in respect of an NSP that is an interconnection point between two local networks. In all other cases, the request must be made at least one calendar month before the NSP is electrically connected or the ICP is transferred.*

### 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

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

### Audit outcome

Compliant

## 6.3. Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)

### Code reference

*Clause 24(1) and Clause 26(3) Schedule 11.1*

### Code related audit information

*If a participant has notified the creation of an NSP on the distributor's network, the distributor must notify the reconciliation manager of the following:*

- *if the NSP is to be located in a new balancing area, all relevant details necessary for the new balancing area to be created and notification that the NSP to be created is to be assigned to the new balancing area*
- *in all other cases, notification of the balancing area in which the NSP is located.*

### Audit observation

The NSP table on the registry was examined, and I examined situations where changes had occurred between GXPs in different balancing areas

### Audit commentary

It was noted in the previous audit that there was a possibility that all GXPs should be in one balancing area as the Duntroon substation (approx. 350 ICPs) is fed from OAM0331 or WTK0111 depending on the time of year. These GXPs are in different balancing areas and it appears there should only be one balancing area. It was recommended that Network Waitaki investigates this matter. It was also recommended that the dedicated/non-dedicated fields should be reviewed because they were all "N", which also supported the reasoning that there should be only one balancing area. Network Waitaki has completed a review of and updated the "dedicated NSP" field so that ICPs which can be supplied from one GXP are recorded as "Y" and ICPs which can be supplied by more than one GXP are recorded as "N". The issue of having ICPs shifting between GXPs in different balancing areas has not been addressed as the GXPs are still in different balancing areas. This is recorded as non-compliance.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.3 With: Clause 24(1) and Clause 26(3) Schedule 11.1 From: 01-Jan-19 To: 28-Apr-20	ICPs are moved between two balancing areas. Potential impact: Medium Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as moderate as Network Waitaki has updated the dedicated/non-dedicated fields correctly but not addressed the balancing areas. The impact on settlement and participants is minor because of the small number of ICPs affected; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
We will apply to get Oam0331 GXP added to Balancing Area		31/7/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We will apply to get Oam0331 GXP added to Balancing Area and ensure controls are tighter around this area going forward.		31/7/2020	

#### 6.4. Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)

##### Code reference

Clause 26(4) Schedule 11.1

##### Code related audit information

*If a participant notifies the creation of an NSP, or the transfer of an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor, the distributor must notify the reconciliation manager at least one calendar month before the creation or transfer of:*

- *the network on which the NSP will be located after the creation or transfer (Clause 26(4)(a))*
- *the ICP identifier for the ICP that connects the network and the embedded network (Clause 26(4)(b))*
- *the date on which the creation or transfer will take effect (Clause 26(4)(c)).*

##### Audit observation

Network Waitaki has not created any embedded networks; therefore, this was not assessed as part of this audit.

##### Audit commentary

Network Waitaki has not created any embedded networks.

##### Audit outcome

Compliant

#### 6.5. Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)

##### Code reference

*Clause 24(2) and (3) Schedule 11.1*

##### Code related audit information

*The distributor must notify the reconciliation manager of any change to balancing areas associated with an NSP supplying the distributor's network. The notification must specify the date and trading period from which the change takes effect and be given no later than three business days after the change takes effect.*

##### 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

The NSP table on the registry was examined. No balancing areas were changed during the audit period.

##### Audit outcome

Compliant

#### 6.6. Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)

##### Code reference

*Clause 27 Schedule 11.1*

##### Code related audit information

*If a transfer of an ICP results in an ICP becoming an NSP at which an embedded network connects to a network, or in an ICP becoming an NSP that is an interconnection point, in respect of the distributor's network, the distributor must notify any trader trading at the ICP of the transfer at least one calendar month before the transfer.*

##### Audit observation

There are no embedded networks connected to Network Waitaki.

##### Audit commentary

There are no embedded networks connected to Network Waitaki.

##### Audit outcome

Compliant

#### 6.7. Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)

##### Code reference

*Clause 1 to 4 Schedule 11.2*

##### Code related audit information

*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

Network Waitaki has not acquired any networks.

**Audit commentary**

Network Waitaki has not acquired any networks.

**Audit outcome**

Compliant

**6.8. Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1)&(3))**

**Code reference**

*Clause 10.25(1)&(3)*

**Code related audit information**

*A network owner must, for each NSP that is not a point of connection to the grid for which it is responsible, ensure that:*

- *there is one or more metering installations (Clause 10.25(1)(a)); and*
- *the electricity is conveyed and quantified in accordance with the Code (Clause 10.25(1)(b)).*

**Audit observation**

Network Waitaki is not responsible for any points of connection not connected to the grid.

**Audit commentary**

Network Waitaki is not responsible for any points of connection not connected to the grid.

**Audit outcome**

Compliant

**6.9. Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2))**

**Code reference**

*Clause 10.25(2)*

**Code related audit information**

*If the network owner proposes the creation of a new NSP which is not a point of connection to the grid it must:*

- *assume responsibility for being the metering equipment provider (Clause 10.25(2)(a)(i)); or*
- *contract with a metering equipment provider to be the MEP (Clause 10.25(2)(a)(ii)); and*
- *no later than 20 business days after identifying the MEP advise the reconciliation manager in the prescribed form of:*
  - a) *the reconciliation participant for the NSP (Clause 10.25(2)(b)(i)); and*
  - b) *the MEP for the NSP (Clause 10.25(2)(b)(ii)); and*
  - c) *no later than 20 business days after the data of certification of each metering installation, advise the reconciliation participant for the NSP of the certification expiry date (Clause 10.25(2)(c)).*

**Audit observation**

The NSP table on the registry was examined. No NSPs were created during the audit period.

### Audit commentary

The NSP table on the registry was examined. No NSPs were created during the audit period.

### Audit outcome

Compliant

## 6.10. Obligations concerning change in network owner (Clause 29 Schedule 11.1)

### Code reference

*Clause 29 Schedule 11.1*

### Code related audit information

*If a network owner acquires all or part of a network, the network owner must notify:*

- *the previous network owner (Clause 29(1)(a) of Schedule 11.1)*
- *the reconciliation manager (Clause 29(1)(b) of Schedule 11.1)*
- *the market administrator (Clause 29(1)(c) of Schedule 11.1)*
- *every reconciliation participant who trades at an ICP connected to the acquired network or part of the network acquired (Clause 29(1)(d) of Schedule 11.1).*

*At least one calendar month notification is required before the acquisition (Clause 29(2) of Schedule 11.1).*

*The notification must specify the ICPs to be amended to reflect the acquisition and the effective date of the acquisition (Clause 29(3) of Schedule 11.1).*

### Audit observation

Network Waitaki has not acquired any networks.

### Audit commentary

Network Waitaki has not acquired any networks.

### Audit outcome

Compliant

## 6.11. Electrically connecting NSP that is not point of connection to grid (Clause 10.30(1))

### Code reference

*Clause 10.30(1)*

### Code related audit information

*A distributor must not electrically connect an NSP that is not a point of connection to the grid unless:*

- *a reconciliation participation has requested the electrical connection (Clause 10.30(1)(a)); or*
- *a metering equipment provider (authorised by the trader) has requested the electrical connection for a temporary energisation of the ICP (Clause 10.30(1)(b)).*

### Audit observation

Network Waitaki has not requested the connection of any NSPs.

### Audit commentary

Network Waitaki has not requested the connection of any NSPs.

**Audit outcome**

Compliant

**6.12. Change of MEP for embedded network gate meter (Clause 10.22(1)(b))**

**Code reference**

*Clause 10.22(1)(b)*

**Code related audit information**

*If the MEP for an ICP which is also an NSP changes the participant responsible for the provision of the metering installation under Clause 10.25, the participant must notify the reconciliation manager and the gaining MEP.*

**Audit observation**

Network Waitaki is not responsible for any ICPs which are also NSPs.

**Audit commentary**

Network Waitaki is not responsible for any ICPs which are also NSPs.

**Audit outcome**

Compliant

**6.13. Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)**

**Code reference**

*Clauses 5 and 8 Schedule 11.2*

**Code related audit information**

*The distributor must give the market administrator confirmation that it has received written consent to the proposed transfer from:*

- *the distributor whose network is associated with the NSP to which the ICP is recorded as being connected immediately before the notification (unless the notification relates to the creation of an embedded network) (Clause 5(a) of Schedule 11.2)*
- *every trader trading at an ICP being supplied from the NSP to which the notification relates (Clause 5(b) of Schedule 11.2).*

*The notification must include any information requested by the Authority (Clause 8 of Schedule 11.2).*

**Audit observation**

Network Waitaki has not acquired any networks.

**Audit commentary**

Network Waitaki has not acquired any networks.

**Audit outcome**

Compliant

**6.14. Transfer of ICPs for embedded network (Clause 6 Schedule 11.2)**

**Code reference**

*Clause 6 Schedule 11.2*

**Code related audit information**

*If the notification relates to an embedded network, it must relate to every ICP on the embedded network.*

**Audit observation**

Network Waitaki has not acquired any networks.

**Audit commentary**

Network Waitaki has not acquired any networks.

**Audit outcome**

Compliant

## 7. MAINTENANCE OF SHARED UNMETERED LOAD

### 7.1. Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))

#### Code reference

*Clause 11.14(2) and (4)*

#### Code related audit information

*The distributor must notify the registry and each trader responsible for the ICPs across which the unmetered load is shared of the ICP identifiers of those ICPs.*

*A distributor who receives notification from a trader relating to a change under Clause 11.14(3) must notify the registry and each trader responsible for any of the ICPs across which the unmetered load is shared of the addition or omission of the ICP.*

#### Audit observation

Network Waitaki does not have any shared unmetered load.

#### Audit commentary

Network Waitaki does not have any shared unmetered load.

#### Audit outcome

Compliant

### 7.2. Changes to shared unmetered load (Clause 11.14(5))

#### Code reference

*Clause 11.14(5)*

#### Code related audit information

*If the distributor becomes aware of a change to the capacity of a shared unmetered load ICP or if a shared unmetered load ICP is decommissioned, it must notify all traders affected by that change or decommissioning as soon as practicable after the change or decommissioning.*

#### Audit observation

Network Waitaki does not have any shared unmetered load.

#### Audit commentary

Network Waitaki does not have any shared unmetered load.

#### Audit outcome

Compliant

## 8. CALCULATION OF LOSS FACTORS

### 8.1. Creation of loss factors (Clause 11.2)

#### Code reference

Clause 11.2

#### Code related audit information

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:

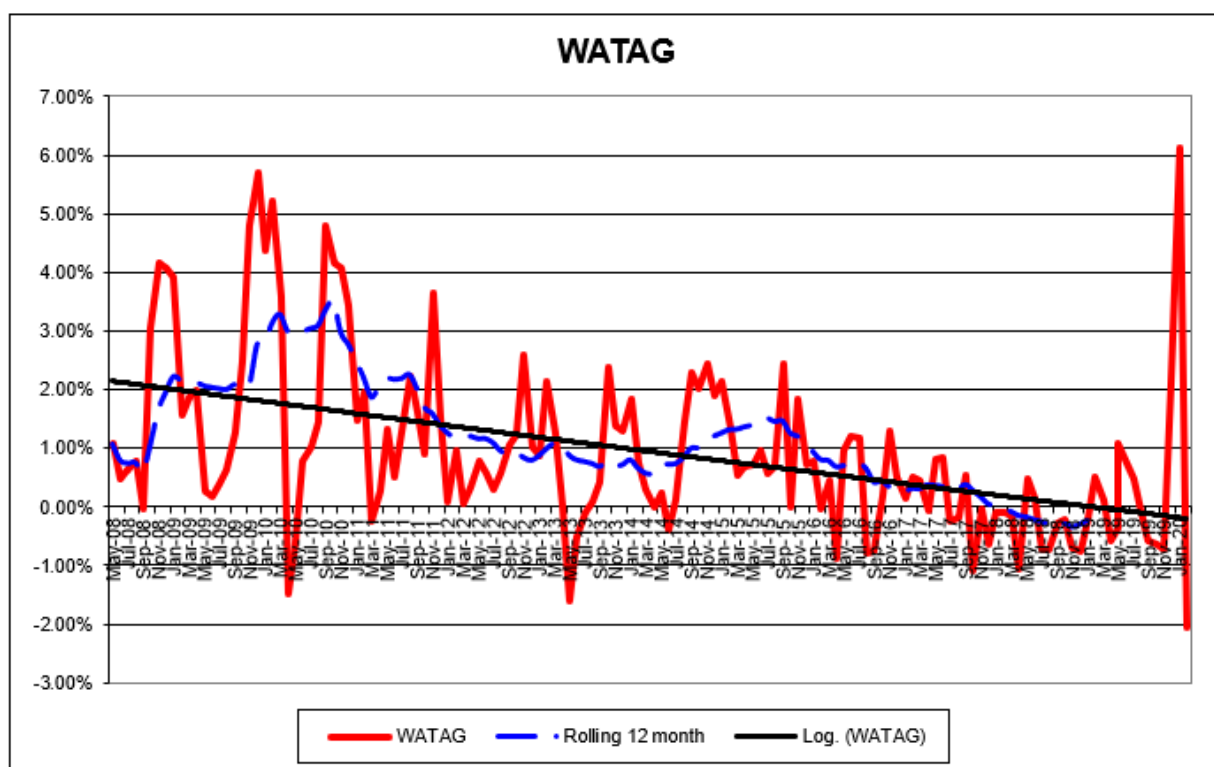
- a) complete and accurate
- b) not misleading or deceptive
- c) not likely to mislead or deceive.

#### Audit observation

Network Waitaki publishes reconciliation losses, which include technical losses and non-technical losses. I reviewed the process and supporting documentation in relation to the calculation of loss factors.

#### Audit commentary

There are three different loss factors: LV, HV (11kV) and HV (110 kV). Analysis of the supporting information did not identify any non-compliance. The graph below shows that UFE is close to zero. The trend will be monitored during future audits to ensure it does not drop further, which would indicate that loss factors were potentially too high.



#### Audit outcome

Compliant

## CONCLUSION

This audit found six non-compliances and makes no recommendations.

The main issue to address is that the balancing areas need to be reviewed as there are ICPs that are seasonally moved between GXP's which are in different balancing areas.

Network Waitaki has improved its data discrepancy reporting during the audit period which has led to a decrease in the volume of data inaccuracies and late registry updates.

Network Waitaki has reviewed and updated the streetlighting connection process in consultation with the Waitaki District Council to include a trader approval step.

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. The Future Risk Rating table provides some guidance on this matter and contains a future risk rating score of seven, which results in an indicative audit frequency of 18 months. I agree with this recommendation.

## PARTICIPANT RESPONSE

Are finding it very frustrating that in each Audit there are non compliances found that have been in most cases there since the Registry was installed in 2013 and I have to ask the question why havnt they been found before now.