

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

Network Waitaki Limited

NZBN: 9429038763250



Prepared by: Steve Woods

Date audit commenced: 9 March 2022

Date audit report completed: 21 May 2022

Audit report due date: 22-May-22

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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 13th, 2022, due 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.

The previous audit identified that the balancing areas needed to be reviewed as ICPs were moved seasonally moved between GXPs in different balancing areas. Network Waitaki now only has one balancing area.

Network Waitaki has robust data discrepancy reporting in place and are also implementing the use of the Audit Compliance reporting to further strengthen the monitoring of data inaccuracies and late registry updates. After the audit, Network Waitaki implemented additional validation steps to strengthen the controls and therefore improve registry accuracy. The details are contained in Appendix 1.

The audit found five non-compliances and makes no recommendations. Two of the non-compliances are cleared. The next audit frequency table indicates that the next audit be due in 24 months. I have considered this in conjunction with Network Waitaki's comments and I agree with the 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
Requirement to provide complete and accurate information	2.1	Clause 11.2(1)	Some missing IECDs and registry information not complete and accurate.	Strong	Low	1	Cleared
Initial electrical connection date population	3.5	7(2A) of Schedule 11.1	Two late initial electrical connection date updates.	Strong	Low	1	Identified
Changes to registry information	4.1	Clause 8 Schedule 11.1	A small number of records updated on the registry later than three business days after event.	Strong	Low	1	Identified
ICP location address	4.4	Clause 2 Schedule 11.1	Two ICPs with Lot numbers recorded	Strong	Low	1	Identified
Distributors to Provide ICP Information to the Registry	4.6	Clause 7(1)(o) of Schedule 11.1	Incorrect registry information for five DG ICPs. 19 missing IECDs.	Strong	Low	1	Cleared
Future Risk Rating						5	

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

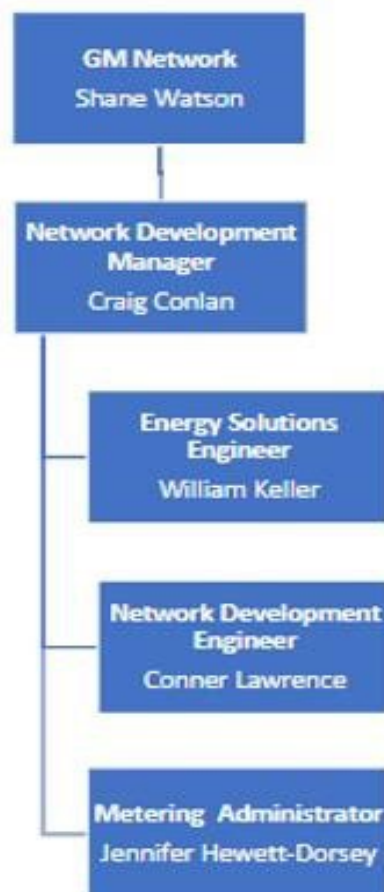
I checked the Authority's website to identify any exemptions in place.

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 provided a copy of the relevant part of the organisation chart:



1.3. Persons involved in this audit

Auditors:

Name	Company	Role
Steve Woods	Veritek Limited	Lead Auditor
Claire Stanley	Veritek Limited	Supporting Auditor

Network Waitaki personnel assisting in this audit were:

Name	Title
Craig Conlan	Network Development Manager
Jennifer Dorsey	Metering Administrator

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 2% of the new connections completed. This matter was discussed during the audit to ensure Network Waitaki understands their responsibilities under this clause. Network Waitaki now also employ three full time inspectors and they manage all the other new connections.

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:

- Calect Electrical - Callum Reid – Kurow,
- Altitude Electrical - Kerry Wilson – Twizel, and
- Plunket Electrical – Oamaru.

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	WTKIVLYWATAG	G	1/07/2020	11,009
WATA	TWZ0331	TWIZEL		WATA	WTKIVLYWATAG	G	1/05/2008	630
WATA	WTK0111	WAITAKI		WATA	WTKIVLYWATAG	G	13/11/2015	1,609
WATA	WTK0331	WAITAKI		WATA	WTKIVLYWATAG	G	1/05/2008	1

The list file as of 1 March 2022 was examined and found:

Status	Number of ICPs (2022)	Number of ICPs (2020)	Number of ICPs (2019)
Distributor	0	0	0
New	1	1	0
Ready	24	9	11
Active	13,249	13,089	12,976
Inactive - new connection in progress (1,12)	11	8	14
Inactive – vacant (1,4)	287	243	238
Inactive – AMI remote disconnection (1,7)	24	22	19
Inactive – electrically disconnected due to meter disconnected (1,8)	4	2	1
Inactive – at pole fuse (1,9)	2	1	1
Inactive – electrically disconnected at meter box switch (1,10)	0	0	0
Inactive - at meter box switch (1,11)	0	0	0
Inactive – ready for decommissioning (1,6)	0	0	1
Decommissioned (3)	1,293	1,232	1,176

1.9. Authorisation Received

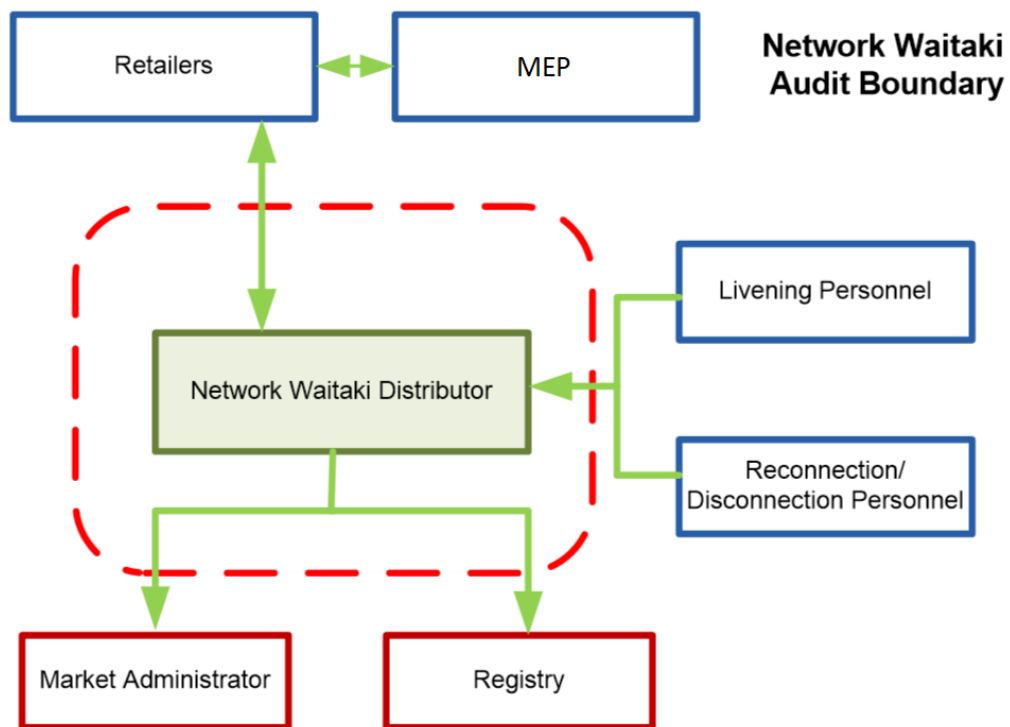
Network Waitaki provided a letter of authorisation to Veritek, permitting the collection of data from other parties for matters directly related to the audit.

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 on Teams due to Covid 19 constraints on 13th April 2022.

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 April 2020 by Rebecca Elliot 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, IECDs and registry information not complete and accurate.	Still existing
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.	Still existing
NSP accuracy	4.2	7(1),(4) and (5) Schedule 11.1	Two ICPs with incorrect NSPs.	Cleared
ICP location address	4.4	2 Schedule 11.1	One ICP with insufficient address information.	Still existing
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.	Still existing
Notice of balancing areas	6.3	24(1) and Clause 26(3) Schedule 11.1	ICPs are moved between two balancing areas.	Cleared

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

I walked through the process to ensure that registry information is complete, accurate and not misleading or deceptive, including viewing reports used to resolve discrepancies.

The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were 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.

As detailed in **section 4.1** there were a small number of records updated on the registry later than three business days after event.

The audit found some ICPs with no initial electrical connection date populated on the registry. This was investigated by Network Waitaki, and it was identified that these were missed when updating the registry. Network Waitaki intend to use the Audit Compliance reporting to monitor this. This is detailed in **section 4.6**.

Network Waitaki continues to look for improvements to identify and manage any discrepancies.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11.2(1) From: 01-Mar-20 To: 31-Jan-22	Some missing IECDs and registry information not complete and accurate. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because additional validation has recently been implemented and the details were supplied to the auditor. The details are contained in Appendix 1. The audit risk rating is assessed to be low as the volume of ICPs affected is small and all corrections have been made.		
Actions taken to resolve the issue		Completion date	Remedial action status
IECD errors fixed		14/04/22	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
We have issued a purchase order to our consultant to develop new sweeps to help identify: - IECD discrepancies - Backdating discrepancies - Identify DG that we are unaware of		20/5/2022	

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 registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to confirm compliance.

Audit commentary

Network Waitaki have robust processes and procedures in place to ensure they provide correct and accurate information. Registry notification files are checked, regular reporting is used to check and

monitor for discrepancies. Any discrepancies found are investigated and updated as required. Network Waitaki will also start using the audit compliance reports to check for discrepancies.

Audit outcome

Compliant

2.3. Removal or breakage of seals (Clause 48(1A) and 48(1B) of Schedule 10.7)

Code reference

Clause 48(1A) and 48(1B) of Schedule 10.7

Code related audit information

If the distributor provides a load control signal to a load control switch in the metering installation, the distributor can remove or break a seal without authorisation from the MEP to bridge or unbridge the load control device or load control switch – as long as the load control switch does not control a time block meter channel.

If the distributor removes or breaks a seal in this way, it must:

- *ensure personnel are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code*
- *replace the seal with its own seal*
- *have a process for tracing the new seal to the personnel*
- *notify the metering equipment provider and trader*

Audit observation

The PR-255 file was examined to determine whether load control exists. The management of removal and breakage of seals was discussed.

Audit commentary

Network Waitaki may receive an after-hours call, they would break the seal if required in communication with the trader, this is a very rare occurrence. The trader would then send a job to the MEP to return to site to resolve the problem. Network Waitaki would do this as a contractor for the MEP.

Audit outcome

Compliant

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

Code reference

Clause 11.30A

Code related audit information

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

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

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

Audit observation

The Disputes Resolution information was examined for Network Waitaki to determine compliance.

The following were provided by Network Waitaki and examined:

- the Network Waitaki website link,
- letter templates, and
- email signature examples.

These are used for correspondence to consumers. The IVR message on the 0800 number was also checked.

Audit commentary

All of these provided clear and prominent information about Utilities Disputes for the consumer, including contact details and links to the Utilities Disputes website. The Network Waitaki website provides the Utilities Dispute information clearly on the Complaints page.

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 281 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 and is described in **section 3.2**. A diverse characteristics sample of 20 new connection applications of the 281 created during the audit period from 1 March 2020 to 31 January 2022 were checked from the point of application through to when the ICPs were created. This included three ICPs with distributed generation present at the time of being electrically connected.

Audit commentary

Network Waitaki ICP requests are received directly from customers or their agents via the online application and includes the proposed trader and contractor. When the application is approved by an engineer, the ICP is created at "ready". If engineering work is required, the applicant is notified, and a quote is provided. When payment is received for the application, the ICP is created at "ready".

The New Connection form contains all the relevant information for the ICP including the Electrical Contractor details and the livening Inspector and is provided to the retailer for approval. The retailer is expected to notify Network Waitaki if they reject the ICP, and the customer is notified.

The records for 20 ICPs were examined. Most of the 20 ICPs were created on the day the request was received, one ICP was created late, and this was due to staff on leave. As the customer applies to Aurora in the first instance, and not the retailer, the 3-day rule does not apply. Compliance is confirmed.

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

A diverse characteristics sample of 20 new connection applications of the created since 1 March 2020 were checked from the point of application through to when the ICP was created, to confirm the process and controls worked in practice.

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

Audit commentary

The process for updating the registry is manual. Checks are completed to ensure the information is accurate, and validation reports are 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 new connection process was examined. The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine the timeliness of the provision of ICP information for 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 registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine the timeliness of the provision of the initial electrical connection date.

Audit commentary

There is a requirement to populate the initial electrical date within 10 business days of physical electrical connection. 248 (88%) of the 281 ICPS were updated with the initial electrical connection date within the required timeframe.

Ten late events were examined and found:

- two were updated late due to human error, and
- eight appeared to be updated late but were updated within the correct timeframe initially, the event was later replaced when additional information was updated on the registry.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 01-Mar-20 To: 31-Jan-22	Two late initial electrical connection date updates. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	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. The audit risk rating is assessed to be low as this has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
IECD errors fixed		14/04/22	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have issued a purchase order to our consultant to develop new sweeps to help identify: - IECD discrepancies - Backdating discrepancies - Identify DG that we are unaware of		20/5/2022 (scheduled)	

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 for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance. There are no ICPs with shared unmetered load on Network Waitaki.

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 in **section 3.2**.

The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance.

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 registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance.

Audit commentary

The new connection process was examined in **sections 3.1** and **3.2**. There were 281 new ICPs created and electrically connected. No requests from MEP's have been received to temporarily electrically connect an ICP.

The audit compliance report found one ICP 0000422236WTD4F where the meter certification date was earlier than the initial electrical connection date. I examined the ICP and confirmed that the Network Waitaki energisation date is correct. Further investigation is required to check the WELLS Test House records for the NGCM metering at the ICP during the ATH audit.

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 trader responsible for ensuring there is a metering installation for the point of connection.

The distributor that initiates the connection under Part 11 and connects the NSP must, within 5 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

The NSP table was reviewed.

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 10.30A and 10.30B)

Code reference

Clause 10.30A and 10.30B

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.

A distributor may only electrically connect an NSP if:

- each distributor connected to the NSP agrees
- the trader responsible for delivery of submission information has requested the electrical connection
- the metering installations for the NSP are certified and operational metering

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

The process for the creation of ICPs was examined, and all ICPs have been manually created in the appropriate format.

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 as of 31 January 2022 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 ICP creation process was reviewed. The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance.

Audit commentary

There is one ICP at the “new” status in the list file, with an ICP creation date of 20 November 2019. This was updated to “decommissioned – set up in error” on 6 April 2022. 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

The process to monitor ICPs at “new” and “ready” status was reviewed. The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance.

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 have been three ICPs at “ready” for longer than 24 months and these have been confirmed as still required. There was one ICP at “new” status for longer than 24 months, this was updated to “decommissioned – set up in error” on 6 April 2022.

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:*
 - o *the unique loss category code assigned to the ICP*
 - o *the ICP identifier of the ICP*
 - o *the NSP identifier of the NSP to which the ICP is connected*
 - o *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(4)

Code related audit information

No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant.

Audit observation

Processes were examined for the connection of ICPs and NSPs.

Audit commentary

Network Waitaki will only connect a point of connection if requested by the trader responsible in the registry. Network Waitaki provide an approval to live to the livening Agent who is acting on behalf of Network Waitaki.

Audit outcome

Compliant

3.17. Electrical disconnection of a point of connection (Clause 10.30C and 10.31C)

Code reference

Clause 10.30C and 10.31C

Code related audit information

A distributor can only disconnect, or electrically disconnect an ICP on its network:

- *if empowered to do so by legislation (including the Code)*
- *under its contract with the trader for that ICP or NSP*
- *under its contract with the consumer for that ICP*

Audit observation

The Network Waitaki process for bridging control devices was examined.

Audit commentary

Network Waitaki understand their responsibilities in relation to this clause. They only conduct electrical disconnection for safety, and they only conduct disconnection where ICPs are to be decommissioned.

Audit outcome

Compliant

3.18. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33C

Code related audit information

A distributor may only electrically connect an ICP in a way that bypasses a meter that is in place ("bridging") if the distributor has been authorised by the responsible trader.

The distributor can then only proceed with bridging the meter if, despite best endeavours:

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

If the distributor bridges a meter, the distributor must notify the responsible trader within 1 business day and include the date of bridging in its advice.

Audit observation

The Network Waitaki process for bridging control devices was examined.

Audit commentary

Network Waitaki may receive a call from a customer after hours, to investigate 'no power'. Network Waitaki will attend the site and may bridge the meter if required. Network Waitaki advise the MEP who will in turn advise the retailer to arrange a job to complete the unbridging and resealing work.

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 13th 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.

In the case of a change to price category codes, where the change is backdated, no later than 3 business days after the distributor and the trader responsible for the ICP agree on the change.

Audit observation

The management of registry updates was reviewed.

The combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance. The event detail report was examined to identify backdated event updates. A sample using typical characteristics of data discrepancies were reviewed to determine the reasons for the late updates.

Audit commentary

The process for updating the registry is manual, the registry is updated directly, and it is updated daily. The table below details the quantity and compliance of registry updates.

Update	Date	Late	% Compliant	Average Days
Address	2021	2	98%	18.79
	2022	4	92%	122.12
Price Codes	2021	15	99.50%	
	2022	29	98.50%	
Status	2021	7	89%	1.89
	2022	1	97%	1.23
Network (excl. New Connection & Distributed Generation)	2021	4	N/A	N/A
	2022	4	N/A	N/A
Distributed Generation	2021	14	44%	71.72
	2022	21	69%	18.38
NSP changes	2021	6	N/A	N/A
	2022	2	N/A	N/A

Pricing events

There were 1,832 pricing updates identified. 29 late events were identified and a selection of six were examined and found that they were all data entry errors, they have since been corrected.

Address events

423 address updates were made. The combined audit compliance reporting found four late address updates. These were examined and found that they all related to data corrections.

Status events

The decommissioning process is discussed in **section 4.11**. The network is required to update the ICP to decommissioned within three days of the event, or the date that the trader changes the status to "inactive - ready to decommission", whichever is later.

67 status updates to decommissioned were identified. One of these was late. I examined the late update and found the date used was the date of the fire at the property at Ohau. As the whole area was badly damaged, Network Waitaki took time to ensure the correct ICP was to be decommissioned.

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 four late network updates. This was reviewed and found that they were all data entry errors that were corrected.

Change of NSP

The process of NSP changes was examined. The audit compliance report identified two NSP changes, these were examined and found that the incorrect POC was assigned, this was identified and corrected. The POC's were on the boundary, additional checks are now made in GIS to ensure the correct POC is allocated.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Mar-20 To: 31-Jan-22	A small number of records updated on the registry later than three business days after event. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	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
Noted		14/4/22	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
We have issued a purchase order to our consultant to develop new sweeps to help identify: - IECD discrepancies - Backdating discrepancies - Identify DG that we are unaware of		20/05/22	

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 process to determine the correct NSP was examined. The registry list for 31 January 2022 was reviewed to determine compliance.

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 combined audit compliance reporting found two ICPs where the NSP may have been recorded incorrectly. Examination of these confirmed that the NSP was recorded accurately.

Audit outcome

Compliant

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

Network Waitaki seldom receives direct requests for ICP identifiers. ICP identifiers can be provided immediately on request once the address has been confirmed.

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

The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance.

Audit commentary

The audit compliance report did not identify any ICPs with insufficient address information. Two ICPs were identified with a Lot number, these were both followed up with the WDC to obtain street numbers when they became available, they have been updated on the registry. Network Waitaki advise they actively seek additional address information from the WDC.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: Clause 2 Schedule 11.1 From: 01-Mar-20 To: 31-Jan-22	Two ICPs with Lot numbers recorded. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong 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
<p>Rarely, there are times when we need to energise an ICP for our customers before the Street Address is created by the local District Council. In this case the Lot number/DP number is the only unique identifier in existence. It is our view that this allows the ICP to be readily located.</p> <p>For these two ICP's we used a hybrid of the lot number and street name (as the street name was known but numbers hadn't been allocated). While this allows us to readily locate the address, we acknowledge that it may not allow other participants to readily locate the ICP.</p> <p>These have both been corrected to street addresses</p>		13/04/22	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Our process is to always use street numbers when they have been issued.</p> <p>We have amended our process to use the Lot/DP combination to identify an ICP if a street address has not yet been issued. Our weekly discrepancy reporting tracks any ICPs in this situation and we correct these as soon as street numbers are available.</p>		13/4/22	

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

This was examined as part of the new connection process and proof of process was checked as part of the sample of 20 new connections examined.

Audit commentary

Network Waitaki's new connections process contains a step that ensures that any ICP can be electrically disconnected without disconnecting any other ICP. Network Waitaki has some historic shared service mains. If any of these are found, separate fusing is installed to address this.

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

The management of registry information was reviewed. The registry list for 31 January 2022 and the combined registry compliance audit reports covering the period from 1 March 2020 to 31 January 2022 were examined to determine compliance. A sample using typical characteristics of data discrepancies were checked.

Audit commentary

The process for updating the registry is manual for all fields.

Registry data validation processes are discussed in **section 2.1**. 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 five ICPs where the trader profile indicated that distributed generation was present, and the network did not have any record of this. These were examined and found four ICPs had distributed generation installed but the details had not been updated on the registry, these have now been corrected. The trader for one ICP arranged the installation of a meter capable of measuring generation and the customer had distributed generation installed without informing Network Waitaki. Network Waitaki have since been in contact to arrange an inspection.

Network Waitaki have reviewed their processes and are now monitoring the EIEP1 files to identify any anomalies.

Initial electrical connection date

The audit compliance report identified 19 ICPs where the initial electrical connection date had not been populated. Network Waitaki are investigating using the Audit Compliance reports to monitor and correct missing Initial electrical connection dates.

The audit compliance report identified ten ICPs where the initial electrical connection date was different to the active date or the certification date. These were examined, Network Waitaki had provided the correct date, this was confirmed by checking the new connection sheets.

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 71 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. The load matched for 69 ICPs. There was a discrepancy between the load details recorded for two ICPs. These were investigated, the trader has corrected the load on the registry to match Network Waitaki's for one ICP. The other ICP has now been decommissioned on the registry.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.6 With: Clause 7(1)(o) of Schedule 11.1 From: 01-Mar-20 To: 31-Jan-22	Incorrect registry information for five DG ICPs. 19 missing IECDs. Potential impact: Low Actual impact: Low Audit history: Twice Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong because additional validation has recently been implemented and the details were supplied to the auditor. The details are contained in Appendix 1. The audit risk rating is low as the errors found have a minor effect on reconciliation. All issues are now resolved.		
Actions taken to resolve the issue		Completion date	Remedial action status
Errors corrected		14/04/22	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
We have issued a purchase order to our consultant to develop new sweeps to help identify: <ul style="list-style-type: none"> - IECD discrepancies - Backdating discrepancies - Identify DG that we are unaware of 		20/05/22	

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 management of registry information was reviewed. The registry list and event detail report for 1 March 2020 to 31 January 2022 were reviewed to determine compliance.

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 co-ordinates recorded.

Audit commentary

GPS co-ordinates 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 as of 31 January 2022 to identify that all ICPs at "ready" status had a nominated trader and a single price category recorded.

Audit commentary

Network Waitaki create the ICP at "ready". Notification is sent to the proposed trader, customer, and electrician when the ICP has been approved and created. The trader is expected to notify Network Waitaki if they reject the ICP, and the customer is notified.

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 contactor that the decommissioning has taken place. This includes confirmation that metering has been removed.

Network Waitaki monitor the NOT files for ICPs that are at “ready for decommissioning” status. Examination of the Lis file did not find any ICPs at “ready for decommissioning” status.

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 or changed 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

The loss category code table on the registry was examined.

Audit commentary

There have been no changes to loss category codes 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.

The notice provided to the reconciliation manager must be provided no later than 30 days prior to the intended date of creation or decommissioning.

If the intended date of creation or decommissioning changes the distributor must provide an updated notice as soon as possible.

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, 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 was examined.

Audit commentary

No NSPs have been 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 was examined.

Audit commentary

No NSPs have been 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

Network Waitaki have one balancing area WTKIVLYWATAG.

BLACKPOINT balancing area BPT1101WATAG exists on the Network Supply Points table, it is not in the Registry and does not have any ICPs associated to it. It is inserted between Transpower and a North Otago irrigation 11kV connection. Network Waitaki own some assets here and pass through charges.

Audit outcome

Compliant

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

The NSP table was reviewed.

Audit commentary

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

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, Network Waitaki now only has one balancing area.

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's NSPs are all grid connected.

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 the reconciliation participant for the NSP (Clause 10.25(2)(b)); and*
- *no later than five business days after the date of certification of each metering installation, advise the reconciliation manager of*
 - a) the MEP for the NSP (Clause 10.25(2)(c)(i)); and*
 - b) the NSP of the certification expiry date (Clause 10.25(2)(c)(ii)).*

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Network Waitaki does not have any responsibility for NSP metering.

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

The NSP supply point table was reviewed.

Audit commentary

Network Waitaki has not acquired any networks.

Audit outcome

Compliant

Audit outcome

Compliant

6.11. 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

The NSP supply point table was reviewed.

Audit commentary

Network Waitaki is not responsible for any embedded network gate meters.

Audit outcome

Compliant

6.12. 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

The NSP supply point table was reviewed.

Audit commentary

Network Waitaki has not initiated the transfer of any ICPs during the audit period.

Audit outcome

Compliant

6.13. 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 initiated the transfer of any ICPs during the audit period.

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

The registry list for as of 1 March 2022 was reviewed to identify any ICPs with shared unmetered load connected.

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

The registry list for as of 1 March 2022 was reviewed to identify any ICPs with shared unmetered load connected.

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:

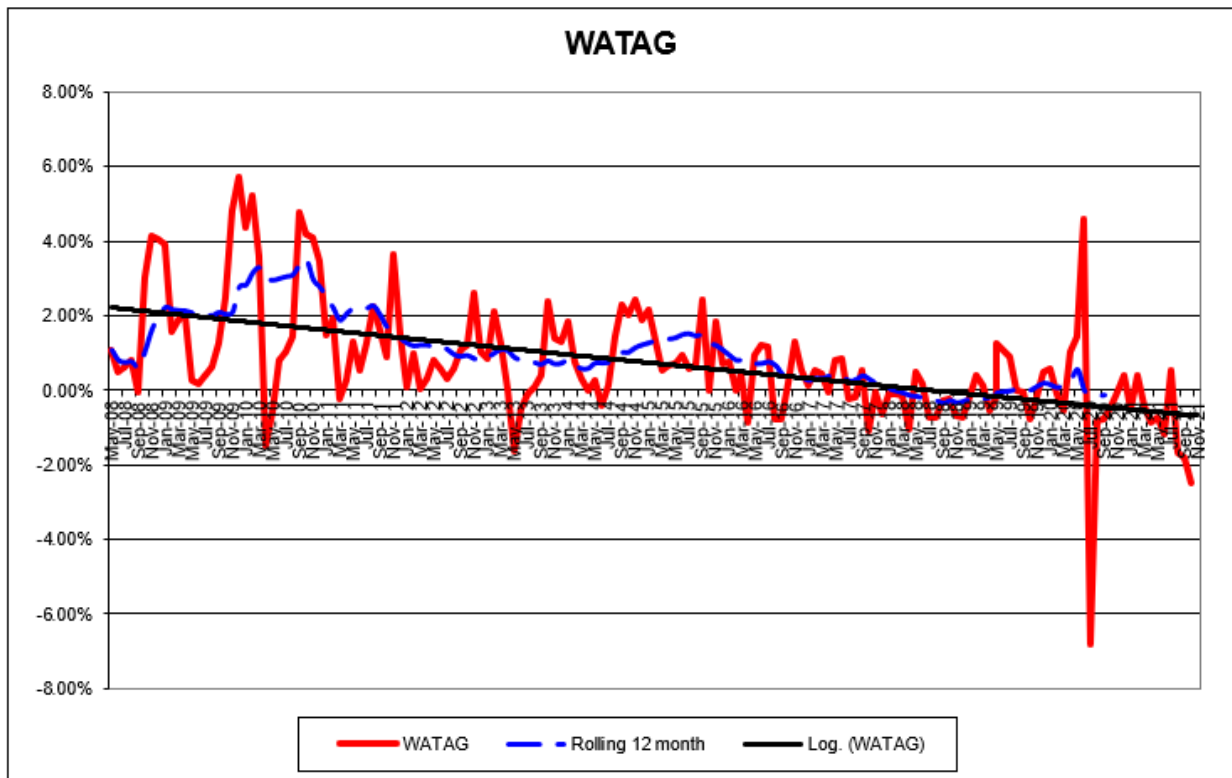
- complete and accurate
- not misleading or deceptive
- not likely to mislead or deceive.

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). Loss factor reviews are completed annually and follow the EA's guidelines. Network Waitaki losses are tracking within the accepted +/-1% threshold.



Audit outcome

Compliant

CONCLUSION

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

The previous audit identified that the balancing areas needed to be reviewed as ICPs were moved seasonally moved between GXPs in different balancing areas. Network Waitaki now only has one balancing area.

Network Waitaki has robust data discrepancy reporting in place and are also implementing the use of the Audit Compliance reporting to further strengthen the monitoring of data inaccuracies and late registry updates. After the audit, Network Waitaki implemented additional validation steps to strengthen the controls and therefore improve registry accuracy. The details are contained in Appendix 1.

The audit found five non-compliances and makes no recommendations. Two of the non-compliances are cleared. The next audit frequency table indicates that the next audit be due in 24 months. I have considered this in conjunction with Network Waitaki's comments and I agree with the recommendation.

PARTICIPANT RESPONSE

Network Waitaki has reviewed this report and their comments are contained within the report.

APPENDIX 1. ADDITIONAL REGISTRY VALIDATION

The following information was provided by Network Waitaki after the audit and before completion of the final audit report. This information supports the risk ratings in Sections 201 and 4.6.

System overview

Network Waitaki maintains a parallel copy of Registry data, refreshed nightly. At 1:30am each morning, we bring down a PR-030 file listing events processed with entered data in the previous day: new records, reversals, and replacements. We merge this into a PR-030 table in the database. At 3:30am each morning, we bring down PR-010 entries for every ICP with an event in that prior PR-030 file, back to a date preceding that of the earliest effective date contained within that PR-030. We merge this into a PR-010 table in our database.

We then apply a set of data rules to the data; some rules applied daily, some weekly and some monthly. The rules are implemented as SQL fragments, so what they look for can be amended at any time.

We have found that occasionally Registry is not up to date at 1:30am and events sent in by participants just before midnight have not yet appeared in the PR-030. We compensate for this by asking for the last 2 day's events at 1:30am each morning and discarding the records of those we already know about. Once a month we refresh both the PR-010 and PR-030 tables for the last two years; this being the maximum amount our billing can backdate (3rd washup). Once a year we refresh back one decade. It would be very difficult for us to not know about a Registry event affecting an ICP within our Distributor or MEP realm.

The rules we apply are split into three groups.

- There is a "daily" set. These are primarily looking at data consistency within Registry i.e. anomalies in our data, or things we have to do, that involve sending an event to Registry to correct.
- There is a "weekly" set. These are primarily involved in reconciling differences between our records and those in Registry. When applied to MEP data, this meets the Code requirement under Schedule 11.4 Clause 6(2) which requires this reconciliation at least monthly.
- There is a third set, run monthly. These collate "interesting" statistics for management, such as retailer and MEP market shares, switching of trader or MEP for large customers, new ICPs, new DG etc.

From time-to-time we discover a new way that data can "go wrong"; it is simply a case of writing a SQL fragment to identify records that have the relevant data pattern, and listing them.

IECD Rule Functional Description

A rule has been added today looking at IECD. It sweeps for ICPs without an IECD where there is an active event (i.e. not reverse or replaced) containing an installation certificate, or a trader status event of "Active", both definitive proof that IECD has happened. The same rule looks for IECDs that do exist, but where the first Active status or first Certificate are dated earlier.

The former are clearly an error by us and invite the IECD to be recorded. The latter are clearly an error but not necessarily by us; the paperwork needs to be checked.

We will shortly be adding a facility to suppress false positive errors.

For example, the row below suggests the ICP was active for 19 days before the meter was certified and we connected the ICP to allow the meter to be certified. This is probably a Trader error with the status date; once the paperwork was confirmed this particular error could be suppressed (with reference to scanned copies of the paperwork).

ItemKey	Synopsis	ItemDescription	Detail
0000370265WTCB8	IECD after first Active	Retailer CTCT; MEP NGCM	First active 01 Jun 2017; First cert 20 Jul 2017; IECD presently 20 Jul 2017

DG Rule Functional Description

Rule 1- Export register turning up in a meter and being part of reconciliation. This is proof that DG has been installed and tells us the date commissioned (but not DG capacity or fuel type) and highlight the situation to metering@networkwaitaki.co.nz so someone can go for a drive to investigate.

Rule 2. Export volume turning up at the end of the month; again definitive proof that DG is present and the first date it was exported, but not DG capacity of fuel type. Again, this is a trigger for someone going for a drive to investigate.

Rule 3. "DG type" of profile code turning up on the ICP (EG8, EG24 etc) from the retailer. This is definitive proof the retailer expects that export is possible, and the date it is possible from. Again, we would be missing the capacity and fuel type and may have to go for a drive to investigate.