ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT

For

WELLINGTON ELECTRICITY LINES LIMITED
NZBN: 9429035790433

Prepared by: Rebecca Elliot

Date audit commenced: 6 September 2023

Date audit report completed: 12 February 2024

Audit report due date: 28 February 2024

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EXECUTIVE SUMMARY

This distributor audit was performed at the request of **Wellington Electricity Lines Ltd (Wellington Electricity),** to encompass the Electricity Industry Participation Code requirement for an audit in accordance with clause 11.10 of part 11. The audit was carried out at Wellington Electricity's premises in Wellington on November 17th, 2023.

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

Wellington Electricity has made excellent progress in addressing the non-compliances found in the last audit, and this is reflected in the future risk rating score reducing from 20 to eight. Specifically:

- Gentrack is now able to manage shared unmetered load,
- good progress investigating the private lights provided by the local Councils; only one light has been confirmed as shared unmetered load and a parent ICP has been created and the shared unmetered load added to the relevant child ICPs, and
- no errors were found in the registry information confirming that BAU processes in place are robust.

There are some potential historic errors being investigated, which are detailed in the report. This includes reviewing the balancing areas for Wellington Electricity. ICPs should only be in the same balancing area if an NSP within the balancing area could receive supply from at least one other NSP within the balancing area. If an alternative supply is not possible between groups of NSPs, then separate balancing areas should be used. Work on this was undertaken in 2018, but due to staff changes over this time this has not been progressed and I have raised a recommendation that this be progressed.

The audit found seven non-compliances and makes four recommendations. This is decrease of five non-compliances from the 13 found in the last audit. 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 nine. This indicates a next audit frequency of 12 months. I have considered this in conjunction with Wellington Electricity's responses and agree with that recommendation.

I thank Sharlene and her team for all their help in getting this audit completed.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Participants may request distributors to create ICPs	3.2	11.5(3)	One ICP of a sample of 30 ICPs was not created within three business days and notification not provided to the participant.	Strong	Low	1	Identified
Timeliness of Provision of ICP Information to the registry manager	3.4	7(2) of Schedule 11.1	Three ICPs not created or made "ready" on the registry prior to these connections being electrically connected.	Moderate	Low	2	Investigating
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	Some late initial electrical connection date updates.	Strong	Low	1	Identified
Connection of ICP that is not an NSP	3.6	11.17	Three ICPs where the trader was not recorded as accepting responsibility in the registry prior to electrical connection.	Strong	Low	1	Investigating
Changes to registry information	4.1	8 Schedule 11.1	Ten late address updates. Two of a sample of 15 ICPs with late pricing updates of a possible 400 late updates. Ten late network updates from a sample of ten, from a possible 271 late network updates. Eight of a sample of ten ICPs of a possible 185 late distributed generation updates. Ten late status updates from a sample of ten, from a possible 26 status updates. Four of a sample of 25 late NSP changes from a possible 48 late NSP changes.	Moderate	Low	2	Identified
ICP location address	4.4	2 Schedule 11.1	Two ICPs with the same address. 298 "active" ICPs without a readily locatable address.	Strong	Low	1	Identified
GPS coordinates	4.8	7(8) and (9) Schedule 11.1	53 ICPs with the incorrect GPS co-ordinates.	Strong	Low	1	Identified
Future Risk Rating						9	

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
Timeliness of Provision of ICP Information to the registry manager	3.4	ICP creation	Review GTV functionality to enable ICP start date for ICPs to be earlier than the first event date.
ICP location address	4.4	Readily locatable addresses	Review all "active" ICPs with no unit or street number and only a business name or description such as "Antique shop" recorded in the property address and add address details as appropriate.
Distributors to Provide ICP Information to the Registry manager	4.6	Unmetered load details	Update any distributed load unmetered load ICPs with "DUML" rather than the load detail.
Notice of balancing areas	6.3	Balancing areas	Wellington Electricity reviews its balancing areas to ensure that ICPs are only in the same balancing area if an NSP within the balancing area could receive supply from at least one other NSP within the balancing area.

ISSUES

Subject	Section	Issue	Description
Distributors must create ICPs	3.1	Regarding clause 15.2 and 15.37B(b)	Lights that are electrically connected on a customer network are not captured within the current code wording as these are not connections to Wellington Electricity's network and are downstream.

1. ADMINISTRATIVE

1.1. Exemptions from Obligations to Comply with Code (Section 11)

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

Section 11 of the Electricity Industry Act provides for the Electricity Authority to exempt any participant from compliance with all or any of the clauses.

Audit observation

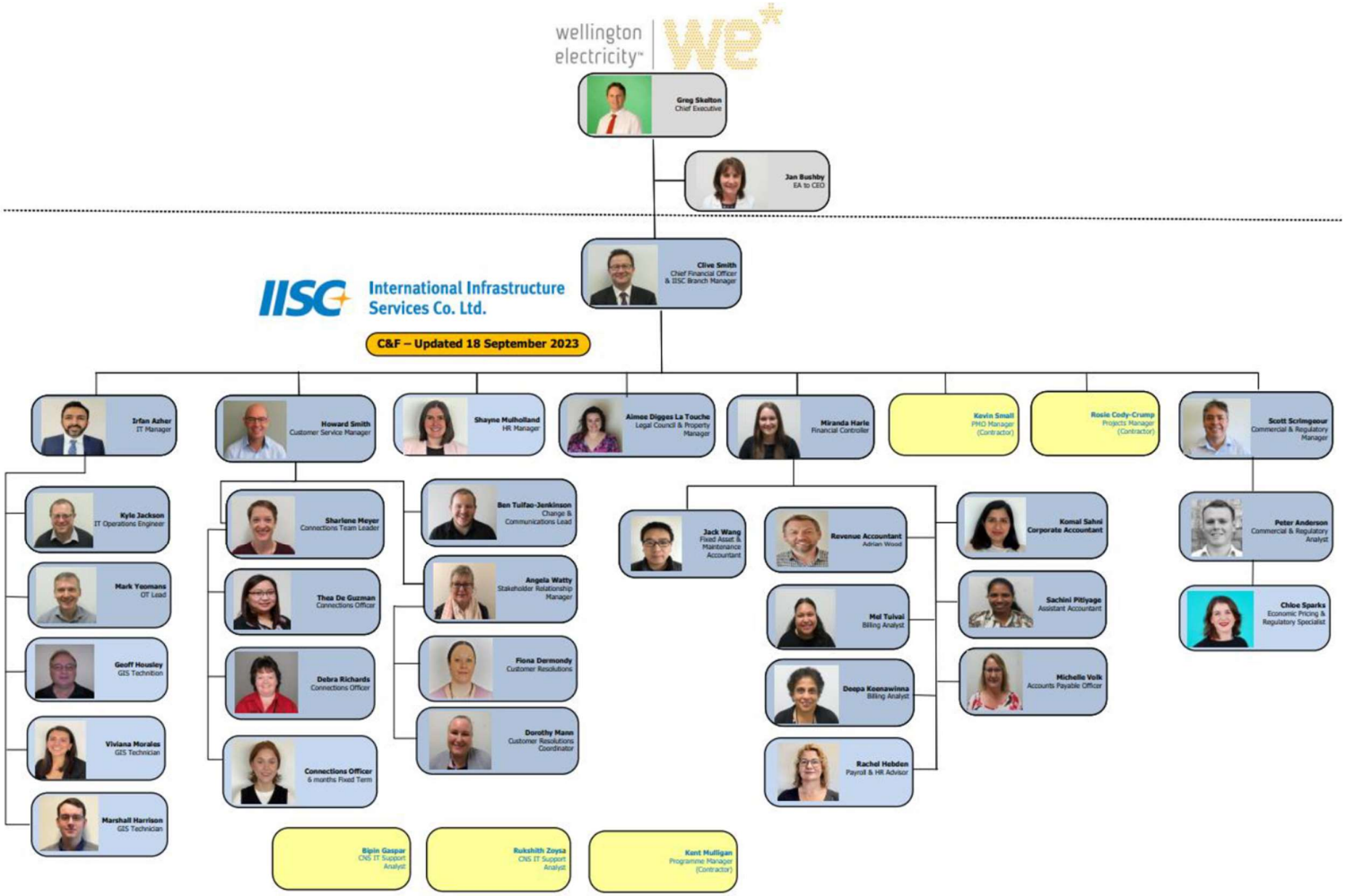
The Authority website was checked to determine whether there are code exemptions in place.

Audit commentary

Review of exemptions on the Authority website confirmed that there are no exemptions in place relevant to the scope of this audit.

1.2. Structure of Organisation

Wellington Electricity provided a copy of their organisational structure as of September 2023:



1.3. Persons involved in this audit

Auditors:

Name	Title	Company
Rebecca Elliot	Auditor	Veritek Limited

Personnel assisting in this audit were:

Name	Title
Imogen Cassin	Connections Officer
Sharlene Meyer	Connections Team Leader
Thea De Guzman	Connections Officer

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

The use of contractors was discussed with Wellington Electricity.

Audit commentary

Wellington Electricity uses two authorised livening agents to perform electrical connection activities of their Network:

- Northpower, and
- Mark Telfer Electrical (MTE).

All other activities are completed directly by Wellington Electricity.

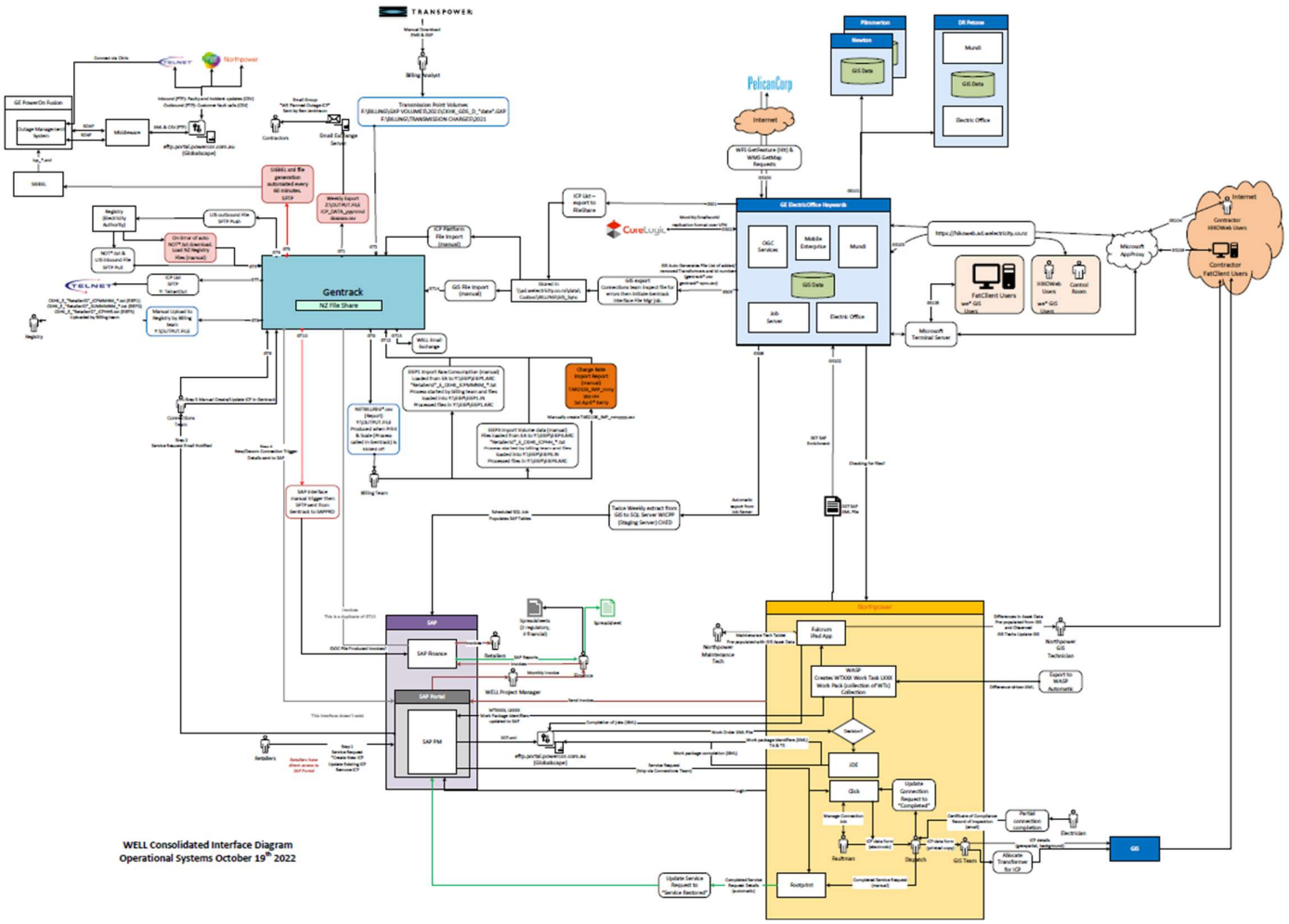
Wellington Electricity understands that they are responsible for code compliance.

1.5. Supplier list

Wellington Electricity has provided the list in **section 1.4** of sub-contractors authorised to perform electrical connection activities on their network.

1.6. Hardware and Software

Wellington Electricity provided an interface diagram that detailing how the different systems are used:



The main systems used by Wellington Electricity to meet its code obligations are:

- **SAP,** which is used to manage workflows,
- **GTV** (v5), which is used to create ICPs and interface with the registry, and
- **Hikoweb** (GIS), which is used to identify the correct NSP and address information.

The Hikoweb, Gentrack, and SAP databases and servers are all backed up to CommVault disk media, which are then transferred to tape and stored off site. DR testing has occurred across all three systems in the last six months.

Access to the systems is restricted through the use of logins and passwords.

1.7. Breaches or Breach Allegations

The Electricity Authority confirmed that there have been no alleged breaches for Wellington Electricity.

1.8. ICP and NSP Data

Wellington Electricity owns and operates the electricity network in the Wellington region.

Wellington Electricity NSPs

The table below lists the relevant NSPs and their associated balancing area, and the number of "active" ICPs connected. No Wellington Electricity NSPs have been created, decommissioned, or transferred since the 2023 audit.

Dist	NSP POC	Description	Parent POC	Parent Ntwk	Balancing Area	Network type	Start date	No of ICPs
CKHK	CPK0111	Central Park			WELLTONUNETG	G	1 February 2009	7,402
CKHK	CPK0331	Central Park			WELLTONUNETG	G	1 February 2009	42,619
CKHK	GFD0331	Gracefield			WELLTONUNETG	G	1 February 2009	19,914
CKHK	HAY0111	Haywards			WELLTONUNETG	G	1 February 2009	7,015
CKHK	HAY0331	Haywards			WELLTONUNETG	G	1 February 2009	6,204
CKHK	KWA0111	Kaiwharawhara			WELLTONUNETG	G	1 February 2009	5,593
CKHK	MLG0111	Melling			WELLTONUNETG	G	1 February 2009	8,019
CKHK	MLG0331	Melling			WELLTONUNETG	G	1 February 2009	12,641
CKHK	PNI0331	Pauatahanui			WELLTONUNETG	G	1 February 2009	7,243
CKHK	TKR0331	Takapu Road			WELLTONUNETG	G	1 February 2009	34,472
CKHK	UHT0331	Upper Hutt			WELLTONUNETG	G	1 February 2009	11,289
CKHK	WIL0331	Wilton			WELLTONUNETG	G	1 January 2014	12,797

Networks embedded under Wellington Electricity NSPs

Wellington Electricity does not own any embedded networks. There are 109 embedded networks connected to the Wellington Electricity network.

Four new embedded networks were created during the audit period of 1 November 2022 to 25 September 2023. The new embedded networks are detailed in the table below and are discussed in the relevant sections of this report.

Dist	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date
PPNZ	PSB0013	44 Bowen Street	WIL0331	CKHK	PSB0013PPNZE	E	1 July 2023
TENC	TTW0011	The Works	TKR0331	CKHK	TTW0011TENCE	E	22 July 2023
TENC	TVL0011	Victoria Lane Aprtmnts	CPK0111	CKHK	TVL0011TENCE	E	1 September 2023
TENC	TWR0011	Willowbank Rise	TKR0331	CKHK	TWR0011TENCE	E	1 November 2022

The Victoria Lane Apartments (TVL0011) and Willowbank Rise (TWR0011) embedded networks were incorrectly included in the last audit, but they were electrically connected in this audit period.

Embedded network PHS0011 was decommissioned on 23 June 2023. All ten ICPs were transferred back to Wellington Electricity. This is discussed further in **section 6**.

Dist	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	End date
TENC	PHS0011	195 Lambton Quay Wgtn	KWA0111	CKHK	PHS0011TENCE	E	1 June 2018	30 June 2023

ICP status

Wellington Electricity's ICPs are summarised by status below:

Status	Number of ICPS (2023)	Number of ICPS (2022)	Number of ICPS (2021)	Number of ICPs (2020)	Number of ICPs (2019)	Number of ICPs (2018)
New (999)	-	-	-	-	-	2
Ready (000)	97	70	187	132	142	86
Active (2,0)	175,208	173,503	171,735	170,428	168,737	167,633
Distributor (888)	123	118	111	108	101	96
Inactive - new connection in progress (1,12)	299	437	312	317	177	155
Inactive - vacant (1,4)	2,827	2,648	2,569	2,539	2,564	2,694
Inactive - AMI remote disconnection (1,7)	1,213	1,093	886	808	813	781
Inactive - de-energised due to meter disconnected (1,8)	34	29	19	20	15	10
Inactive - at pole fuse (1,9)	50	52	36	32	30	30

Inactive - de-energised at meter box switch (1,10)	14	8	9	10	8	11
Inactive - at meter box switch (1,11)	7	8	4	8	5	4
Inactive - ready for decommissioning (1,6)	11	16	22	16	10	174
Inactive – reconciled elsewhere (1,5)	0	1	2	1	-	-
Decommissioned (3)	10,539	9,874	9,203	8,471	7,757	6,926

1.9. Authorisation Received

An email of authorisation was provided.

1.10. Scope of Audit

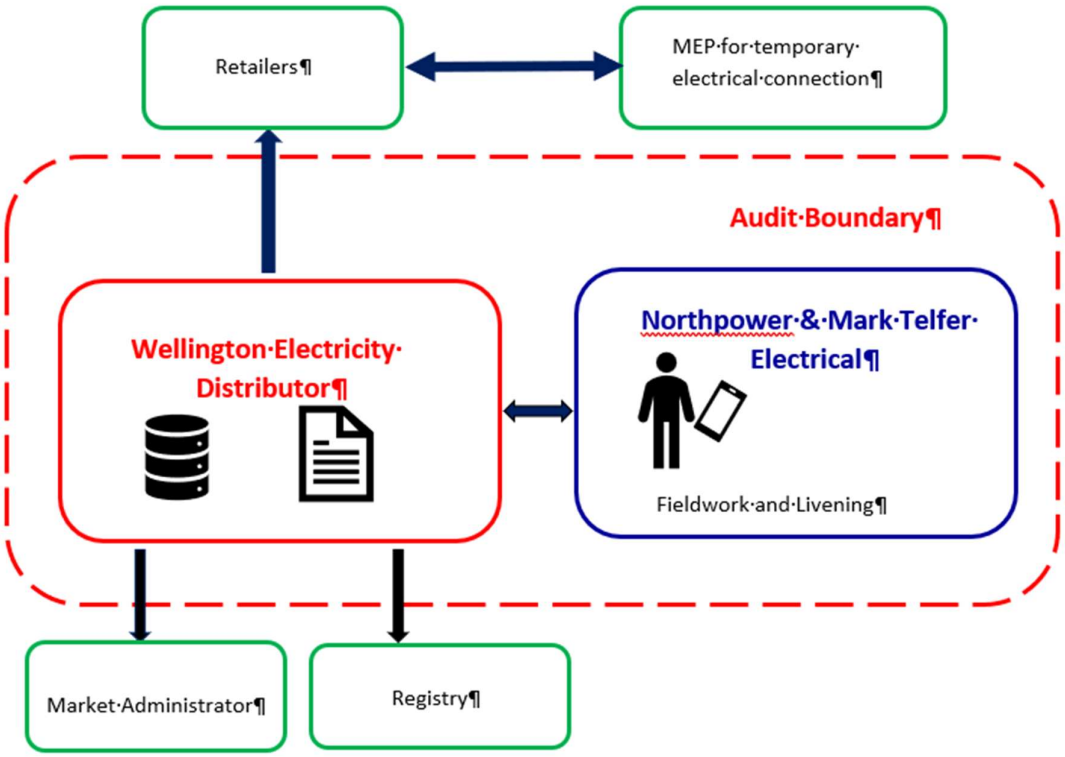
This distributor audit was performed at the request of Wellington Electricity, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at Wellington Electricity's premises in Wellington on November 17th, 2023.

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

The table below shows the tasks under clause 11.10(4) of Part 11, which Wellington Electricity is responsible for. There are no agents who assist with these tasks:

Functions Requiring Audit Under Clause 11.10(4) of Part 11	**Contractors Involved in Performance of Tasks**
The creation of ICP identifiers for ICPs.	Nil
The provision of ICP information to the registry and the maintenance of that information.	
The creation and maintenance of loss factors.	

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


Retailers¶
MEP·for·temporary·
electrical·connection¶
Audit·Boundary¶
Wellington·Electricity·
Distributor¶
Northpower·&·Mark·Telfer·
Electrical¶
Fieldwork·and·Livening¶
Market·Administrator¶
Registry¶

1.11. Summary of previous audit

I reviewed a copy of the previous audit report, completed in January 2023 by Rebecca Elliot and by Bernie Cross of Veritek Limited. The audit found 13 non-compliances and made 11 recommendations. The current status of these in relation to the clauses are detailed in the table below:

Table of Non-compliance

Subject	Section	Clause	Non-Compliance	Status
Requirement to provide complete and accurate information	2.1	11.2(1) and 10.6(1)	A small number of discrepancies and some corrections from the last audit still to be corrected. Unmetered load associated with up to 407 private lights not recorded on the registry via either standard or shared unmetered load ICPs resulting in a potential under submission of up to 138,000 kWh per annum. Some distributed generation event dates not reflective of connection date. Eight ICPs with the incorrect NSP recorded. One LE ICP was assigned the non-dedicated flag incorrectly. Five ICPs with the incorrect unmetered load details recorded.	Cleared
Requirement to correct errors	2.2	11.2(2) and 10.6(2)	Correction of some data not carried out as soon as practicable due to temporary work backlogs. Unmetered load associated with up to 407 private lights not recorded on the registry via either standard or shared unmetered load ICPs resulting in a potential under submission of up to 138,000 kWh per annum.	Cleared
Distributors must create ICPs	3.1	11.4	Unmetered load associated with up to 407 private lights not recorded on the registry via either standard or shared unmetered load ICPs resulting in a potential under submission of up to 138,000 kWh per annum.	Cleared
Participants may request distributors to create ICPs	3.2	11.5(3)	Two ICPs not created within three business days and notification not provided to the participant.	Still existing
Timeliness of Provision of ICP Information to the registry manager	3.4	7(2) of Schedule 11.1	Five ICPs not created or made "ready" on the registry prior to these connections being electrically connected.	Cleared
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	Some late initial electrical connection date updates.	Still existing
Connection of ICP that is not an NSP	3.6	11.17	Traders were not identified or confirmed as taking responsibility for five ICPs prior to these connections being electrically connected.	Still existing
Connection of ICP that is not an NSP	3.7	10.31	Traders were not identified or requested livening for five ICPs prior to these connections being electrically connected.	Cleared

Subject	Section	Clause	Non-Compliance	Status
Changes to registry information	4.1	8 Schedule 11.1	1,196 late pricing updates. 17 late status updates. 7 late network updates. 239 late distributed generation updates. 18 late NSP changes.	Still existing
Notice of NSP for each ICP	4.2	7(1), (4) and (5) Schedule 11.1	Eight ICPs with the incorrect NSP recorded.	Cleared
ICP location address	4.4	2 Schedule 11.1	66 "active" ICPs without a readily locatable address.	Still existing
Electrically disconnecting an ICP	4.5	3 Schedule 11.1	ICP 1001158552CK7FD was created and connected downstream of another ICP resulting in the possibility of it being disconnected where the upstream ICP is disconnected.	Cleared
Distributors to Provide ICP Information to the Registry manager	4.6	7(1) Schedule 11.1	One LE ICP (0000167678CK980) with the NSP dedication initially set to No. One ICP (0000043289TRC57) with distributed generation present and the incorrect installation type of "L". Some incorrect initial electrical connection dates recorded (17 from the current audit period and the remaining all relate to prior to the requirement coming into effect). Some distributed generation event dates not reflective of connection date. Five ICPs identified from the previous audit with the incorrect unmetered load details recorded. Five ICPs with the incorrect unmetered load details recorded. 72 unmetered pay phones with incorrect hours of operation recorded with an annual load impact of 4,925 kWh of under submission. Unmetered load associated with up to 407 private lights not recorded on the registry via either standard or shared unmetered load ICPs resulting in a potential under submission of up to 138,000 kWh per annum.	Cleared

Table of Recommendations:

Subject	Section	Recommendation	Status
Distributors must create ICPs	3.1	Wellington Electricity to review this process with the relevant traders and councils to ensure that streetlights are reconciled from the date of electrical connection.	Adopted
Timeliness of Provision of ICP Information to the registry manager	3.4	Review the internal communication of unmetered new connections managed by the project team and the connection team.	Adopted
Timeliness of Provision of Initial Electrical Connection Date	3.5	Require authorised agents to provide livening paperwork to Wellington Electricity, or where the connection is downstream of Wellington Electricity's network contact the trader to ensure the livening paperwork is provided.	Adopted

Subject	Section	Recommendation	Status
Monitoring of "new" & "ready" statuses	3.14	Wellington Electricity incorporates a process to actively monitoring of registry status 1,12 "new connection in progress" into their regular monitoring and escalation process to traders where these have not been made "active" within 12/24 months.	In progress
Electrical connection of a point of connection	3.16	Wellington Electricity reviews the new connection and electrical connection process for streetlights to ensure that the new unmetered streetlight load listed in each application is accounted for from the electrical connection date.	Adopted
Changes to registry information	4.1	Wellington Electricity reviews the process to determine the distributed generation effective dates using record of inspection (ROI) dates and ensure these are consistently provided by solar installers and inspectors.	Adopted
Electrically disconnecting an ICP	4.5	Wellington Electricity to review its new connection/ICP creation process to ensure similar scenarios of commercial buildings converted into multiple tenancies is captured as part of the application process.	Adopted
		Wellington Electricity reviews its livening agent checklist and processes to ensure new connection cannot be livened where they are aware of upstream metering being present and this metering point/ICP is not being decommissioned as part of the downstream connection activity	Adopted
Distributors to Provide ICP Information to the Registry manager	4.6	Wellington Electricity to remove the invalid initial electrical connection dates for ICPs connected prior to 29 August 2013 but have an initial electrical connection date post this date.	Adopted
		Work with the traders to determine the correct values for the ICPs with discrepancies.	In progress
		Publish annual operational hours for streetlight circuit as part of pricing disclosure to ensure trader can correctly apply the operational hours for unmetered load.	Adopted

2. OPERATIONAL INFRASTRUCTURE

2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1))

Code reference

Clause 11.2(1) and 10.6(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 Parts 10 or 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 as of 25 September 2023 and the registry audit compliance report covering the period from 1 November 2022 to 25 September 2023 were examined to confirm compliance.

Audit commentary

The registry processes were checked and found largely to be the same.

Registry synchronisation

Registry updates are processed automatically by GTV each night. If GTV does not have valid values recorded in all the fields required for the registry update, the registry update will not be processed for the affected ICP, and the ICP will be listed on the "held" report.

Each business day staff work through the exceptions on the "held" report and update the missing information so that the registry update can be processed at the next opportunity. I reviewed recent "held" reports and confirmed anything that appears on this report is actioned.

A daily GTV "health check" is conducted, including review of registry acknowledgements, and error reports.

Mismatches between GTV and the registry are identified and resolved through the data validation processes described below.

Registry and data validation

Each business day, a registry list is compared to GTV using Microsoft Access. The list of checks is comprehensive. Wellington Electricity also downloads the audit compliance report daily to identify discrepancies.

This audit did not find any incorrect information but did identify some potential discrepancies which are being investigated. The registry information will be corrected, if required once the investigations are complete. These are detailed below for reference:

- Wellington Electricity have identified some potential historic connections to their network that may be more than one point of connection to the network but are grouped under one ICP as detailed in **section 3.1**,
- ICP 0000191228TR370 is under investigation in conjunction with the retailer to determine if distributed generation is present as detailed in **section 4.6**,
- ICPs 0000159166CK658 and 0000159069CK082 are both bus shelters where Wellington Electricity has no unmetered load recorded (both were approved as metered loads as the expected load exceeded the allowable unmetered load threshold, but these were electrically connected in 2018 as unmetered loads with a daily kWh load of 1.21); Wellington Electricity is working with the trader to investigate these as detailed in **section 4.6,**
- 11 ICPs where the Wellington Electricity's unmetered load details do not match trader's unmetered load within ±0.1 kWh are being investigated (all are with the same trader) and six of these are indicated to be distributed unmetered load but these are not on the Distributed Unmetered Load registry; Wellington Electricity are investigating if the loads are connected to one circuit, in which case these are standard unmetered load, but if they are not, then a database is expected to manage the load, and these should be audited (this is noted for the trader's next audit, as detailed in **section 4.6** and
- a number of private lights that could be either standard or shared unmetered load are under investigation as detailed in **section 4.6**.

Audit outcome

Compliant

2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2))

Code reference

Clause 11.2(2) and 10.6(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

Wellington Electricity's data management processes were examined. The registry list as of 25 September 2023 and the registry audit compliance report covering the period from 1 November 2022 to 25 September 2023 were examined to confirm compliance.

Audit commentary

Wellington Electricity corrects information as soon as possible as is required by the code.

I saw evidence of incorrect information being identified and corrected during the audit, through the registry update and discrepancy processes discussed in **section 2.1**.

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

Audit observation

The management of removal and breakage of seals was discussed.

Audit commentary

Wellington Electricity, as a distributor, does not complete any work requiring a change of seal. Bridging of control devices is not conducted.

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 process to ensure that information on Utilities Disputes is provided to customers was discussed. Wellington Electricity's website, email footers, and Utilities Disputes Messaging process were reviewed.

Audit commentary

Information on Utilities Disputes is prominently and clearly displayed:

- on invoices and outbound communications relating to electricity services and bills,
- in written acknowledgements for and responses to complaints,
- in written responses to customer enquiries,
- on all outbound email footers, and
- on their website on each page.

A pre-recorded message is played to consumers advising about Utilities Disputes for all incoming calls. Wellington Electricity has no social media presence.

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

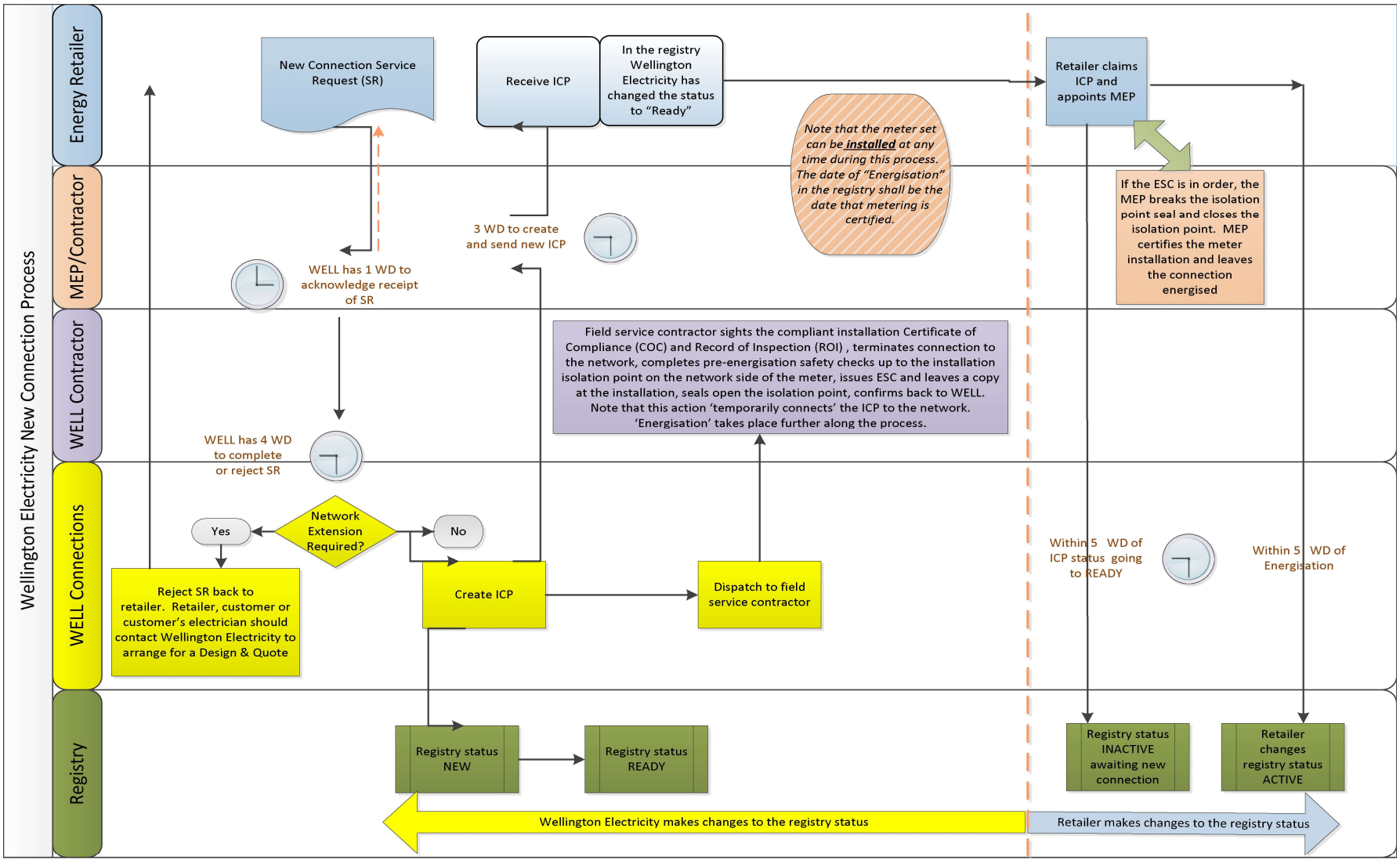
The new connection process was examined in detail and is described in **section 3.2**. 30 new connection applications of the 2,612 created during the audit period from 1 November 2022 to 25 September 2023 were sampled using diverse characteristic methodology from the point of application through to when the ICP was created. This included six ICPs with unmetered load associated, one ICP with distributed generation associated and four ICPs with a metering category of 3 or above.

I also checked the four new embedded networks, to determine whether an LE ICP had been created.

The creation of shared unmetered load was examined.

Audit commentary

Wellington Electricity creates ICPs as required by clause 1 of schedule 11.1. The new connection process is set out below, and remains unchanged since the 2016 audit:


Wellington Electricity New Connection Process
Energy Retailer
MEP/Contractor
WELL Contractor
WELL Connections
Registry
New Connection Service Request (SR)
Receive ICP
In the registry Wellington Electricity has changed the status to "Ready"
Retailer claims ICP and appoints MEP
Note that the meter set can be installed at any time during this process. The date of "Energisation" in the registry shall be the date that metering is certified.
If the ESC is in order, the MEP breaks the isolation point seal and closes the isolation point. MEP certifies the meter installation and leaves the connection energised
3 WD to create and send new ICP
WELL has 1 WD to acknowledge receipt of SR
Field service contractor sights the compliant installation Certificate of Compliance (COC) and Record of Inspection (ROI) , terminates connection to the network, completes pre-energisation safety checks up to the installation isolation point on the network side of the meter, issues ESC and leaves a copy at the installation, seals open the isolation point, confirms back to WELL. Note that this action 'temporarily connects' the ICP to the network. 'Energisation' takes place further along the process.
WELL has 4 WD to complete or reject SR
Network Extension Required?
Yes
No
Reject SR back to retailer. Retailer, customer or customer's electrician should contact Wellington Electricity to arrange for a Design & Quote
Create ICP
Dispatch to field service contractor
Within 5 WD of ICP status going to READY
Within 5 WD of Energisation
Registry status NEW
Registry status READY
Registry status INACTIVE awaiting new connection
Retailer changes registry status ACTIVE
Wellington Electricity makes changes to the registry status
Retailer makes changes to the registry status

The new connection process applies a check on proposed unmetered load connections to ensure the load does not exceed the 3,000/6,000 kWh thresholds that requires the supply to be metered.

The new connection diagram above, does not describe the process to connection of distributed unmetered load. This was examined and is as follows:

- the developer responsible for the subdivision makes a request to connect the new DUML lights via the standard new connection process (the bucket ICP/s that these lights are expected to be added to, and a single line diagram along with the street names (if known) are requested to provide as much detail as possible); Wellington Electricity checks if any private streetlights are to be connected and if so, how are these going to be reconciled (if the private lights are not to be included in the Council load, then these are connected via a separate new unmetered connection application and the application is not processed until this is determined),
- Wellington Electricity seeks the retailer's acceptance with the expectation that the retailer has validated this with the respective council and that the list of street names provided is complete,
- once the retailer confirms acceptance, the streetlight circuit is connected, and
- the council takes responsibility for the lights associated with the streets that are formally vested with the council (which, in most cases, is later than the electrical connection dates for these additional lights but as they have accepted responsibility for the load the non-compliance lies with the retailer) and the DUML databases are then updated; Wellington Electricity are monitoring the DUML streetlight reports being received to confirm that lights have been added as expected and are following up with the retailer if they have not been.

Wellington Electricity has been working through the private lights identified from the Hutt, Porirua and Wellington City Councils DUML audits that have been discussed in the last few audits. Good progress has been made to get these resolved as discussed in **section 4.6**. Changes have been made to Gentrack so that shared unmetered load can be created and maintained. Only one of the private items of load has been confirmed as shared unmetered load. A parent ICP has been created and the shared unmetered load has been added to the child ICPs correctly.

The issue raised in the last audit of private streetlights on customer networks remains and I have repeated this to maintain visibility.

Issue	Description	Remedial action
Regarding clause 15.2 and 15.37B(b)	Lights that are electrically connected on a customer network are not captured within the current code wording as these are not connections to Wellington Electricity's network and are downstream.	Guidance from the Electricity Authority is required.

Wellington Electricity have identified some potential historic connections to their network that may be more than one point of connection to the grid but are grouped under one ICP. The code requires:

*(a) a point at which **electricity** may flow, via one or more phases or conductors—*

*(i) into or out of a **network**; or*
*(ii) both into and out of a **network** at the same time, where each directional flow is on different phases or conductors; and*

(b) for the purposes of Technical Code A of Schedule 8.3, means a grid injection point or a grid exit point

Wellington Electricity are investigating these and if found to be more than one point of connection, additional ICPs will be created.

A review of the sample of 30 new connections found ICPs were created as required by this clause.

LE ICPs were created for the four new embedded networks. All were mapped to the correct NSP.

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 process to request and create ICPs was reviewed, and a diverse sample of 30 ICPs were checked to determine whether the ICP had been created within three business days of a request by a trader.

Audit commentary

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

The ICP creation process was reviewed, and is as follows:

- ICP requests are made directly into a portal to SAP by traders or their agents and must include the information required to create the ICP and progress the connection; if data provided via the portal is incomplete (such as missing address details) the trader is advised of what is required to complete the application and a note is added to the record in SAP,
- once the ICP request is saved, an automatic email is sent to the WE_Connections email inbox and the trader; staff monitor this inbox to manage the next step in the process,
- the data entered into SAP is validated including manual checks for incomplete information, and any inactive ICPs at the same address in Gentrack that need to be decommissioned; any applications with incomplete or duplicate information are held, and a request for further information is sent to the trader,
- the transformer, which corresponds to the NSP, is added manually after checking Hikoweb (GIS) to confirm which transformer the ICP will be connected to; a weekly report of new or changed NSPs is obtained from Hikoweb and matched to Northpower's records to confirm that the correct transformers are recorded for new ICPs,
- GTV automatically generates an ICP identifier once all of the relevant new connection information is loaded,
- the ICP information is uploaded to the registry overnight, if GTV does not have valid values recorded in all the fields required for the registry update, the registry update will not be processed and the ICP will be listed on the "held" report; each business day staff work through the exceptions on the "held" report and update the missing information so that the registry update can be processed at the next opportunity, and
- the trader and the livening agent are then both notified of the details of the newly created ICP.

A sample of 30 new connections were checked, including six ICPs with unmetered load, four with a category 3 or greater meter and one with distributed generation recorded. All but one ICP 0000172121CKF1A were either created or the retailer was advised as to why the ICP could not be created within three business days. The advice of the delay in creating ICP 0000172121CKF1A was sent one day late. This had no material impact but is recorded as non-compliant below.

Four LE ICPs were requested for the connection of the four new embedded networks. All were created or advised of the reason for a delay in creating within three days of the request.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.2 With: Clause 11.5(3) From: 01-Nov-22 To: 25-Sep-23	One ICP of a sample of 30 ICPs was not created within three business days and notification not provided to the participant. Potential impact: Low Actual impact: Low Audit history: Twice previously Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as strong, as the controls are robust and will mitigate risk to an acceptable level. The audit risk rating is assessed to be low as the vast majority of ICPs are created within three business days of request. .

Actions taken to resolve the issue	Completion date	Remedial action status
No action required		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Our daily checks process tracks all requests, providing a daily update of the number of days each request is at, and highlighting any that are due. Additional resource has also been added to the connections team to assist with workload.		

3.3. Provision of ICP Information to the registry manager (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 process to request and create ICPs was reviewed. The list file was examined for all ICPs created during the audit period.

Audit commentary

Wellington Electricity has a fully automated registry update process to ensure all information listed in this clause is provided to the registry. Information was provided as required by this clause for all ICPs created during the audit period. Since the last audit Wellington Electricity has added a process where the AC020 report is used to identify missing data.

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

Audit outcome

Compliant

3.4. Timeliness of Provision of ICP Information to the registry manager (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 and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

The distributor must provide to the registry the information listed in clause 7(1) of schedule 11.1 as soon as practicable, and before electricity is traded at the ICP. Wellington Electricity continues to create all ICPs at "ready", unless they know a network extension is needed.

The Gentrack system performs updates to the registry on a nightly basis.

The audit compliance report confirmed that the registry was updated prior to electrical connection for all ICPs connected during the audit period except for three ICPs. These were reviewed and the reasons for the late creation of the ICPs on the registry were:

- due to confusion of the addresses for a commercial site for two ICPs the two original ICPs were set to "decommissioned-set up in error"; the retailer then found that the sites had been electrically connected but due to a GTV limitation that once an ICP is created it cannot be backdated to a date earlier than the original event date, two new backdated ICPs had to be created so I recommend below that this functionality be reviewed to allow a change to an ICP start date to be earlier than the original event date, and
- due to the electrician cancelling the new connection request in error and was then found to have been connected by the trader. Rather than reversing the incorrectly "decommissioned - set up in error" for ICP 0000171097CK7C3, Wellington Electricity requested a new application and created ICP 0000172627CK197 for the same address.

Recommendation	Description	Audited party comment	Remedial action
Start event date for ICPs	Review GTV functionality to enable ICP start date for ICPs to be earlier than the first event date.	Review Gentrack functionality for backdated ICP's & status reversals.	Investigating

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.4 With: Clause 7(2) of Schedule 11.1 From: 01-Nov-22 To: 25-Sep-23	Three ICPs not created or made "ready" on the registry prior to these connections being electrically connected. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as moderate and will mitigate risk most of the time, but GTV not allowing the correcting of the first start date to be earlier prevents the controls from being strong as duplicate ICPs have to be created to work around this. The impact is assessed to be low as the three backdated ICPs were exceptions, and all were corrected as soon as possible and not indicative of any systemic issues.

Actions taken to resolve the issue	Completion date	Remedial action status
No action required as all ICP's were corrected as soon as they were identified.		Investigating
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Review Gentrack functionality for backdated ICP's & status reversals.	Oct '24	
Develop guidelines for the Connections team on completing reversals in Registry and when they can/should be used.	Aug '24	

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 subclause (1)(p) to the registry manager no later than ten business days after the date on which the ICP is initially electrically connected.

Audit observation

The process for populating initial electrical connection dates was examined.

The registry list and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined to determine the timeliness of the provision of the initial electrical connection date. A typical sample of ten late updates were examined to determine why they were delayed.

Audit commentary

Wellington Electricity does not normally carry out electrical connection on their network. The two approved livening agents (Northpower and Mark Telfer Electrical) complete the connection.

Wellington Electricity are receiving livening notification from their agents.

Wellington Electricity wait for either the MEP to load the metering to the registry or the retailer to move an ICP to “active" to identify ICPs that have been made “active”. The meter certification date is used in the first instance to populate the initial electrical connection date. This is generally accurate but not all meters are certified at the time of electrical connection. Wellington Electricity have adopted the last audit’s recommendation that livening agents provide livening paperwork to them. This information is currently used as a check to confirm that the date populated matches and if not, an investigation is undertaken to check which date is correct. The current format of the returned paperwork is not user friendly, and Wellington Electricity intend to work with their agents to improve this. The accuracy of these dates is discussed in **section 4.6**.

There were 3,969 initial electrical connection date updates in the event detail report. The audit compliance report identified 221 (5.5%). An extreme sample of the five latest updates were checked found that:

- three of the extreme sample were backdated to correct the initial electrical connection date, and
- the other two of the extreme sample were not valid as the network updates related to other fields being changed, indicating that the report is still over reporting the number of late initial electrical connection dates as was reported in the last audit.

A typical sample of the five most recent late updates were checked found that:

- four were due to the late updating from either the retailer or the MEP to populate the metering information and this has caused the late population of the initial electrical connection date, and
- ICP 0000171794CK401 was not valid as the network update related to distributed generation being added.

The late population of the initial electrical connection date is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 01-Nov-22 To: 25-Sep-23	Some late initial electrical connection date updates. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as strong and have been strengthened during the audit period with livening agents providing paperwork directly to Wellington Electricity. The audit risk rating is low as the vast majority of dates are populated within the required timeframe ensuring that traders can confirm they have the correct first "active" date.

Actions taken to resolve the issue	Completion date	Remedial action status
No action required		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Further enhance process for using MEP livening information to cross check all new connections.	Sep 2024	

3.6. Connection of ICP that is not an NSP (Clause 11.17)

Code reference

Clause 11.17

Code related audit information

A distributor must, when connecting an ICP that is not an NSP, follow the 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. The registry list and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined.

Audit commentary

As discussed in **section 3.2**, Wellington Electricity has a step in the new connections process to ensure a trader accepts responsibility and is recorded in the registry. There are no ICPs without a proposed trader recorded in the registry at "ready" status.

The audit compliance report found that three ICPs were electrically connected prior to being made "ready" on the registry and these are described further in **section 3.4.**

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.6 With: Clause *11.17* From: 01-Nov-22 To: 25-Sep-23	Three ICPs where the trader was not recorded as accepting responsibility in the registry prior to electrical connection. Potential impact: Low Actual impact: Low Audit history: Once previously Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as strong as the processes in place have been strengthened during the audit period with greater cohesion between the projects team and the connection team. The audit risk rating is assessed to be low as these were three exceptions and were corrected as soon as they were identified.

Actions taken to resolve the issue	Completion date	Remedial action status
Trader advised and ICPs created as soon as issue was identified. No further action required.		Investigating
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Review Gentrack functionality for backdated ICP's & status reversals.	Oct 2024	

3.7. 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 registry list and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were 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.

As discussed in **section 3.4**, three ICPs were not recorded on the registry before being electrically connected but all had had an ICP requested in the first instance, therefore compliance is recorded.

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 and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined.

Audit commentary

Wellington Electricity's processes are robust in relation to this clause as an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP.

Three ICPs were identified with meter certification dates earlier than the first "active" date. These were examined and found all had been certified using load banks and none had been temporarily electrically connected.

Audit outcome

Compliant

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

Code reference

Clause 10.30

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

The NSP table was reviewed.

Audit commentary

No new NSPs were created by Wellington Electricity during the audit period.

Audit outcome

Compliant

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 examined.

Audit commentary

Any NSPs that are temporarily electrically connected follow the same process as those of all other new connections. No temporarily connected NSPs were identified.

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:

yyyyyyyyyyxxccc where:

- *yyyyyyyyyy 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 Authority.*

Audit observation

The process for the creation of ICPs was examined.

Audit commentary

ICP numbers are created in GTV. The process for the creation of ICPs was examined, and all ICPs are 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 process to assign loss categories was examined. The registry list was examined to confirm all "active" ICPs have a single loss category code.

Audit commentary

Loss categories are determined from the information provided on application for a new connection. The application information is reviewed using the GIS system to confirm NSP/network connection (HV, TX, LV) details which flows through to determining the correct loss factor from Wellington Electricity's published schedule of loss factors.

The registry list was examined and all ICPs have a single loss category code, except decommissioned ICPs which have a blank loss category. Each loss category code 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 was examined to determine compliance.

Audit commentary

ICPs are created on the registry at "ready" once the retailer has accepted responsibility for the ICP, except for embedded network gateway (LE) ICPs or (SI) ICPs which are created with "distributor" status.

Network extensions are not normally required on Wellington Electricity's network. If an ICP genuinely required "new" status, it would be loaded manually on the registry according to the working instructions document.

Review of the registry list report found no ICPs at "new" status. Monitoring of ICPs with "new" and "ready" status is discussed in **section 3.14**.

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 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 audit compliance report for the period from 1 November 2021 to 9 November 2022 was examined to identify any ICPs that had been at "new" and "ready" for more than 24 months.

Audit commentary

The audit compliance report identified no ICPs that have been at the "new" and "ready" status for more than 24 months.

Wellington Electricity monitors ICPs at the "new" and "ready" status using a daily download of the AC020 report.

As detailed in the last audit report, the code does not require that distributor's monitor the registry status 1,12 "new connection in progress" as this status is the responsibility of the trader as they have already claimed the ICP. That audit report recommended that these be monitored, as these could potentially be electrically connected, Wellington Electricity are working to get reporting in place to monitor these as part of the discrepancy checks starting in 2024.

I checked the registry LIS report of ICPs at status 1,12 "new connection in progress" and identified 19 ICPs that have been at this status for more than 24 months. A typical sample of six of these ICPs were examined and found all but one had an "active" ICP at the same address. All of those at status 1,12 were with the same trader. Wellington Electricity checked with the trader and confirmed none of these are required. Wellington Electricity have requested the trader reverse their claim so that these can be "decommissioned - set up in error".

The two ICPs identified in the last audit at this status were rechecked and found:

- ICP 0000156281CKB4B relates to an unmetered cell tower where the connection application from 2017 was cancelled but satellite images of this location show two cell towers being present at this address; the site visit is still to be carried out to confirm if the connection has occurred, and
- ICP 0000161434CK7FC is now "decommissioned - set up in error" as the new connection was completed on ICP 0000161953CK0CE and this is "active" in the registry.

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

The EMI wholesale data set as of 27 January 2023 and registry list were reviewed to identify any generation stations with capacity of 10 MW or more; and to determine compliance.

Audit commentary

No new embedded generation stations with capacity greater than 10 MW were connected during the audit period.

Wellington Electricity supplies one embedded generation station (1001154460CK204) with a capacity of 60 MW. This ICP has an individual loss category code (MILL01) and was connected on 1 April 2014.

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

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 streetlight circuits which are a point of connection was examined.

Audit commentary

Wellington Electricity are aware of their obligation to ensure that the trader has provided approval before streetlights are connected. Wellington Electricity has further strengthened their processes for new streetlight connection as detailed in **section 3.1**.

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 disconnection process was examined.

Audit commentary

Wellington Electricity will only undertake an electrical disconnection when a request is received from a trader or for safety. In both instances Wellington Electricity will liaise with the relevant trader.

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

Processes for meter bridging were reviewed.

Audit commentary

Wellington Electricity do not bridge meters.

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 give written notice to the registry manager 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 ten 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 three business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or three 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 three 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 registry list and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined. A diverse sample of a minimum of ten (or all if there were less than ten examples) backdated events by event type were reviewed to determine the reasons for the late updates including NSP changes.

Audit commentary

When information recorded in the registry changes, the distributor should ensure that the registry is updated within three business days. The registry update process is described in **section 2.1**.

The table below details the quantity and compliance of registry updates.

Update	Date	Late	% Compliant	Average days
Address	2021	0	100%	N/A
	2022	0	100%	N/A
	2023	**10**	**99.32%**	**N/A**
Price codes	2021	2,641	-	N/A
	2022	1,196	-	N/A
	2023	**1,150**	**-**	**N/A**
Status	2021	129	81.98%	N/A
	2022	17	97.34%	1.48
	2023	**26**	**95.79%**	**1.24**
Network (excl. new connection & Distributed Generation)	2021	3	N/A	N/A
	2022	7	N/A	N/A
	2023	**271**	N/A	N/A
Distributed Generation	2021	95	58.14%	N/A
	2022	239	50.41%	30.22
	2023	**185**	**67.66%**	**17.24**
NSP changes	2021	0	100%	N/A
	2022	18	85.6%	N/A
	2023	**48**	**-**	**N/A**

Address events

All but ten address updates were made within three business days. The ten late updates were examined and found to be due to a GTV bug. This occurs when GPS co-ordinates are added in GTV but when this update gets to the registry rather than using the update date as the event date, GTV is applying the last address event date to these updates. Wellington Electricity intend to raise this with GTV to get a fix in place. This has no material impact.

Pricing events

The audit compliance report recorded 1,550 late pricing updates. Of these 1,150 (74%%) were updated four days after the event. Wellington Electricity updates price codes after receiving and processing of EIEP8 files from the traders and these were processed within three days of the file being received which is when agreement with the trader and is therefore compliant.

The sample of 15 ICPs checked included a diverse sample of five ICPs updated four days from the event date, the five most backdated and a typical sample of five ICPs.

For the sample of ICPs updated four days from the event date, all were processed within three days of the EIEP8 file being received and are compliant.

The five most backdated sample found:

- four were updated within three days of agreement with the trader, and
- ICP 0000168695CK501 was a price code correction due to human error and is recorded as non-compliance below.

The typical backdated sample found:

- four were updated within three days of agreement with the trader, and
- ICP 0000102780TR95A was updated late as it was missed due to human error, which is recorded as non-compliance below.

Network events

There were 271 late network events, excluding NSP and DG changes. All related to unmetered load changes. A typical sample of ten late updates were examined and found:

- eight related to corrections made from the last audit, and
- the remaining two were updates to DUML load details.

Distributed Generation events

The distributed generation process is described in **section 4.6**. Wellington Electricity have adopted the last audit's recommendation that solar installers and inspectors provide the ROI information post installation, and they use this information to populate load and fuel type for the correct electrical connection date.

The audit compliance report recorded 185 late distributed generation updates during the audit period which is a reduction from 239 late updates in the last audit period.

A typical sample of ten ICPs and an extreme case sample of the most backdated ten ICPs were examined. Examination of the typical sample found:

- nine were due to reliance on metering updates which were later than three business days, and
- ICP 0000040723TR13C was due to the late notification of the ROI from the installer.

The extreme case sample found that:

- eight were due to late notification from either the trader or customer of either the installation or the removal of distributed generation, and
- two were not valid as the network updates related to other fields being changed such as removal of the initial electrical connection date, indicating that the report is over reporting these.

Status events

The decommission process is described in **section 4.11**.

The audit compliance report recorded 26 ICPs that were updated later than three days after the traders update to the registry or the event, which ever was the later. A typical sample of ten ICPs were examined and found:

- six were due to waiting for another party to reverse an event that was post the decommission date so that the correct decommission date was recorded,
- three were due to late notification from the field, and
- ICP 0000159316TR7A7 was late due to a resource constraint; Wellington Electricity has since added another team member, so this is not expected to reoccur.

NSP changes

The audit compliance report recorded 48 late NSP changes. I checked a sample of 25 of these and found that:

- 18 were replacement of existing events and were not NSP changes, and
- four were NSP corrections backdated to initial electrical connection dates.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Nov-22 To: 25-Sep-23	Ten late address updates. Two of a sample of 15 ICPs with late pricing updates of a possible 400 late updates. Ten late network updates from a sample of ten, from a possible 271 late network updates. Eight of a sample of ten ICPs of a possible 185 late distributed generation updates. Ten late status updates from a sample of ten, from a possible 26 status updates. Four of a sample of 25 late NSP changes from a possible 48 late NSP changes. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as moderate as they will mitigate risk most of the time. The audit risk rating is low overall the timeliness of updates to the registry is high and all are updated within the 14-month revision period.

Actions taken to resolve the issue	Completion date	Remedial action status
Updates were made as soon as correct information received.		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Review a fix with Gentrack to ensure update date is used in Registry when GPS coordinates are added rather than last address event date.	Oct 2024	
Further enhance process of using Record of Inspection information to update DG.	Jun 2024	

4.2. 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 3 business days after receiving a request for that information.

Audit observation

The management of customer queries was examined.

Audit commentary

Wellington Electricity seldom receives direct requests for ICP identifiers. ICP identifiers are provided immediately once the ICP address has been confirmed.

The requestor is advised that future requests should first go to their trader and contact information for the trader is provided.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

Under Clause 7(1)(b) of Schedule 11.1, the distributor must provide to the registry manager the NSP identifier of the NSP to which the ICP is usually connected.

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 audit compliance reporting identified 56 "active" ICPs where 10% or fewer ICPs on a street have a different NSP. All 56 ICPs were examined.

Audit commentary

The NSP for each ICP is notified to the registry as part of the new connection process described in **section 3.2**.

The new connection application requires an address, which is used to locate the nearest transformer in Hikoweb (GIS), which corresponds to the NSP. Network Control notify the connections team of any transformer changes so that the NSP can be updated where necessary.

A weekly report of new or changed NSPs is obtained from Hikoweb and matched to Northpower's records to confirm that the correct transformers are recorded for new ICPs.

Wellington Electricity uses the audit compliance report to assist in identifying any miss mapped ICPs.

The audit compliance reports identified 47 ICPs where 10% or fewer ICPs on a street have a different ICP to other ICPs and where the number of ICPs with a different NSP was less than three. All 47 ICPs were checked, and all were confirmed to have the correct NSP assigned.

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 process to determine addresses are readily locatable was examined. The list file as of 25 September 2023 and the audit compliance report covering the audit period were examined.

Audit commentary

Wellington Electricity relies on information provided on the new connection application and city council address information to determine readily locatable addresses.

Duplicate and unlocatable addresses are identified and corrected daily, as part of the registry validation process discussed in **section 2.1**.

As discussed in **section 3.2**, staff manually check for duplicate addresses for new connections when data is received in SAP. When the data is entered into GTV, a warning message appears if an entered address is an exact match for an existing address. The team also check for any "inactive" ICPs with the same address and if discovered a new ICP is not created until the status of the "inactive" ICP is resolved. Where an address is not unique, staff contact the trader to request further address information and the application is put on hold.

The audit compliance report identified two "active" ICPs with duplicate addresses. These were examined and found that the suburb was updated in September 2023 so that it became duplicated. Additional details have been added to the property name field which makes them each readily locatable.

A review of the registry address information found that the historic ICPs with lot numbers only recorded have been updated to street numbers. I found 298 "active" ICPs with no unit or street number and only a business name or description such as "Antique shop" recorded in the property address. As businesses change these can effectively become unlocatable. I recommend that these be updated to a street number or GPS co-ordinates added so they are readily locatable. This is recorded as non-compliance below.

Recommendation	Description	Audited party comment	Remedial action
ICP location address	Review all "active" ICPs with no unit or street number and only a business name or description such as "Antique shop" recorded in the property address and add address details as appropriate.	Review all ICP's with no unit or street number and add additional address details as needed.	Identified

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.4 With: Clauses 2 Schedule 11.1 From: 01-Nov-22 To: 25-Sep-23	Two ICPs with the same address. 298 "active" ICPs without a readily locatable address. Potential impact: Low Actual impact: Low Audit history: Three times previously Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as strong as the ICP creation process has been strengthened and this mitigates the risks to an acceptable level. The non-compliance relates to historically created ICPs. The audit risk is assessed to be low as the number of ICPs not readily locatable is relatively small.

Actions taken to resolve the issue	Completion date	Remedial action status
Investigate and resolve historical ICP's with not Unit or Street number.	Oct 2024	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Undertake review of all ICP address information to identify further address clarification/strengthening on historical ICP's	Oct 2024	

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

The management of this process was discussed, and a sample of new connections were examined.

Audit commentary

Each new ICP created after 7 October 2002 must be able to be electrically disconnected without electrically disconnecting another ICP, unless it is an ICP that represents the consumption calculated by difference between the total consumption for the embedded network and all other ICPs on that embedded network.

When new physical points of connection are created during the new connection process, there is a check of Hikoweb (GIS) to confirm the network configuration meets the requirements of this clause.

Wellington Electricity has adopted the last audit's recommendation and single line diagrams are now required to confirm that no ICPs are downstream from another and livening agents were reminded to check for this as part of the electrical connection process. No new instances where the network configuration did not meet the requirements of this clause were identified during the audit period.

The last audit identified one example of an ICP being created downstream of another in 2016. ICP 1001157629CK617 has since been decommissioned (this was upstream of three other ICPs).

Audit outcome

Compliant

4.6. Distributors to Provide ICP Information to the Registry manager (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 manager:

- *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 and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined to determine compliance.

Audit commentary

Registry updates are processed automatically by GTV each night. Processes for completeness and accuracy of registry updates are discussed in **section 2.1**. All ICP information was checked and confirmed compliant unless discussed below.

Price and loss categories

Analysis of the list file found all “active" ICPs had all had the correct price category and loss category assigned.

The last audit’s findings were reviewed and found:

ICP	Loss category Code	Loss code description	Meter installation category code	comment
0000171696TR325	VECG3	TX	Cat 1	Confirmed to be correct.
0000103675TRCA6	VECG3	TX	Cat 1	Has been corrected.
0000134190TR11D	VECG4	HV	Cat 2	Has been corrected
0000176529TR92A	VECG1	LV	Cat 4	Was correct and has since been decommissioned.
0000196492TR135	VECG1	LV	Cat 4	Confirmed to be correct.

Distributed Generation

Wellington Electricity adds applications for distributed generation to a spreadsheet once they are approved. Weekly, this spreadsheet is compared to the registry to confirm whether EG (or injection flow) metering is installed. Wellington Electricity also reviews the AC020 report to identify ICPs where the trader has indicated a DG profile, but Wellington Electricity has none recorded. A check against EIEP1/3 reports provided by traders is also used to determine whether the EG registers are recording consumption to confirm if generation is present.

Examination of the registry list shows a steady increase in the number of “active" ICPs with distributed generation year on year:

Year	ICPs with distributed generation
2016	338
2017	460
2018	816
2019	1,102
2020	1,487
2021	1,671
2022	2,174
2023	**2,714**

The audit compliance report found no ICPs where the profile used by the trader indicates that distributed generation is present, but Wellington Electricity had none recorded.

The list file was analysed and identified 153 ICPs where Wellington Electricity has distributed generation recorded, but the trader's profile does not indicate that distributed generation is present. 131 of these ICPs are with Mercury Energy. This is a known issue with the MEEN participant code. The profile is incorrectly recorded as RPS. The remaining 18 ICPs were examined and found:

- the trader has since updated the profile for eight ICPs,
- nine ICPs have the installation of distributed generation recorded on the Electricity and Gas High Risk database; the generation from these maybe being gifted by the trader hence the profile doesn't indicate generation is present, and
- the remaining ICP 0000191228TR370 is still under investigation in conjunction with the retailer.

Initial electrical connection dates

The audit compliance reporting identified seven ICPs with date inconsistencies between the initial electrical connection date, the "active" date and the meter certification date. This is an improvement from the 30 ICPs found in the last audit. All were examined and found:

- four ICPs had a date consistent with the traders first "active" date and the metering was certified later, and
- the remaining three ICPs had a date consistent with the traders first "active" date and the metering was certified earlier; all were confirmed to have been certified using a load bank and the initial electrical connection date was correct.

The audit compliance report recorded 12 ICPs with no initial electrical connection date recorded. These were checked and found all have subsequently been populated correctly as part of BAU. Wellington Electricity continues to use the audit compliance report to identify and resolve ICPs with missing initial electrical connection dates.

The audit compliance reported seven ICPs at "inactive - new connection in progress" with an initial electrical connection date populated. All were checked and found all were correctly populated and the trader has since made these "active".

The last audit report identified 13,530 ICPs where the initial electrical connection dates appeared to be incorrect as the initial "active" status date was prior to 29 August 2013. These have been corrected and no ICPs prior to this requirement coming into effect have an initial electrical connection date recorded.

Unmetered load

Part 11 states the distributors must provide unmetered load type and capacity of the unmetered load to the registry "if known". When new unmetered load is identified, Wellington Electricity confirms the unmetered load with the trader and populates the distributor unmetered load details. All ICPs with an unmetered load electrically connected during the audit period had the unmetered load recorded.

<u>Unmetered load details format</u>

875 "active" ICPs have a value in the Unmetered load details – Distributor field. GTV stores unmetered load details as an installation fixture.

Wellington Electricity has adopted the Electricity Authority's recommended unmetered format of Watts; burn hours; load details.

Historically the unmetered load was entered in to GTV in watts and was automatically converted to kW to two decimal places with "kW" as a suffix.

Trader unmetered load is recorded without distributor unmetered load

Review of the registry list found ten “active" ICPs where the trader had unmetered load recorded, but Wellington Electricity had no unmetered load recorded. This is a reduction from the 46 ICPs found in the last audit. The code requires the load to be recorded “if known”. Examination of these found:

- eight are historic and were connected prior to August 2013 and are not known, and
- ICPs 0000159166CK658 and 0000159069CK082 are both bus shelters that were both approved as metered loads as the expected load exceeded the allowable unmetered load threshold, but these were electrically connected in 2018 as unmetered loads with a daily kWh load of 1.21; Wellington Electricity is working with the trader to investigate these.

Distributor unmetered load is recorded without trader unmetered load

Review of the registry list found all “active" ICPs with distributor unmetered load details recorded also have trader unmetered load details recorded.

Distributor unmetered load details differ from the trader unmetered load details

875 “active" ICPs have a value recorded in the distributor unmetered load details field. I compared the figures for the 510 ICPs where the format of the distributor information enabled recalculation, and a trader unmetered load value was populated. For 413 ICPs Wellington Electricity’s value matched the trader’s value within ±0.1 kWh. 97 ICPs were identified with differences over ±0.1 kWh and 36 were examined during the audit and found:

- one was due to GTV rounding the kW value from 0.025 to 0.03 (this affected a total of 69 of the 97 ICPs),
- 12 are reconciled via a database and do not require the load details to be recorded in the registry; I recommend below that these are updated to reflect this with “DUML,
- the daily unmetered load figure was recorded incorrectly by the trader for five ICPs,
- the remaining 11 ICPs are being investigated (all are with the same trader) and six of these are indicated to be distributed unmetered load but these are not on the Distributed Unmetered Load registry; Wellington Electricity are investigating if the loads are connected to one circuit, in which case these are standard unmetered load, but if they are not, then a database is expected to manage the load, and these should be audited (this is noted for the trader’s next audit). The ICPs are listed below for reference:

ICP	Distributor unmetered load details	Trader unmetered load details
0000155128CKCE6	307W:24:MultUNMLoad	301;24;WCC UML MASTER 24HR CPK0111
0000155130CK45F	0.30kW:24:MultUNMLoad	94;24;WCC UML MASTER 24HR WIL0331
0000155140CK102	0.47kW:24:MultUNMLoad	326;24;WCC UML MASTER 24HR CPK0331
0000156771CKE59	138W:24:G001_69W_NSL;504W:ENG:G001_126W_NSL	714;24;2x69w flow meters+4x144w fluro lamps
0000157855CKCA9	378W:24:MultUNMLoad	358W:24:multiple traffic cameras
1001102688UN264	1.85kW:24:MultUNMLoad	0496;24.0;4xlightingboxes

Recommendation	Description	Audited party comment	Remedial action
Unmetered load details	Update any distributed load unmetered load ICPs with "DUML" rather than the load detail.	Update distributed unmetered load ICPs with "DUML" rather than the load detail.	Identified

Previous unmetered load errors

I checked the previous audit's unmetered load errors and confirmed that they have all been corrected.

DUML and shared unmetered load

Wellington Electricity has resolved the Gentrack issue detailed in the last audit. The management and billing of shared unmetered load is now operational.

DUML audits for streetlight databases on the Wellington Electricity were reviewed to determine whether there were any issues relating to distributor unmetered load records and these are detailed below:

Database	Comment
Porirua City Council	Meridian to work with Wellington Electricity to clearly define the boundaries between lights supplied by TKR0331 and PNI0331 NSPs and ensure the database then correctly reflects these boundaries. 217 private lights are not being reconciled resulting in an annual under submission of approximately 61,000 kWh. PCC is reviewing their policy around the recording of private streetlights within their RAMM database with a view to including these lights for the capture of load for submission purposes, but reflecting these lights are privately owned for maintenance and replacement purposes.
Upper Hutt City Council	Advise developers that where private lights are to be connected, developers are required to arrange the connection with their own retailer and Wellington Electricity to ensure that an ICP number is created. Remind the developer responsible for Wallaceville Estate that they are required to arrange for ICPs to be created for private lights.
Wellington City Council	Meridian to work with both WCC and Wellington Electricity to ensure that all new private lights can be clearly identified through the new connection application process and ensure these are managed separately from the DUML connections and ICPs are created accordingly.
Hutt City Council	Where new private lights are connected, developers are advised to arrange the connection with their own retailer and Wellington Electricity to ensure that an ICP number is created. Existing private lights will not be removed from the database unless the load is recorded against a non-DUML ICP. Records could only be initially saved in the ArcGIS if they were allocated to one of the four HCC DUML ICPs. Where a light should have a different ICP, the user needed to re-access the record to modify the ICP number and re-save. In some cases, this resulted in private lights which should have their own ICP number being incorrectly recorded against DUML ICPs. ArcGIS has now been updated to allow users to apply other ICPs when the record is created.

Wellington Electricity have strengthened their new unmetered streetlight new connection as detailed in **section 3.1**.

Wellington Electricity is investigating the private lighting with the following findings:

Database	Number of private lights indicated by Council	Status
Porirua City Council	217	29 lights have been confirmed as no longer present in the field. 96 lights are on customer networks and the ICP connected to the network has been identified so the load associated with these is being reconciled via those ICPs. Two lights on Wellington Electricity poles are either to be added to the PCC database or be decommissioned. 27 lights are on private residential ROW/streets. PCC is communicating with the customers concerned to advise that the lights are their responsibility before shared or standard unmetered load is created. 63 lights have been identified as being on customer networks. Wellington Electricity is working to identify ICPs that connects these loads to the network or if no ICP can be identified they will then engage with the Electricity Authority to determine how these loads are to be managed. An issue is raised in **section 3.1** in relation to this.
Upper Hutt City Council	9	UHCC added these back to their database in September 2023. This will be checked as part of their next DUML audit.
Wellington City Council	131	The lights are currently being investigated. One light has been confirmed as shared unmetered load and this has been correctly created under parent ICP 0000171621CK2F8 and the shared unmetered load details have been added to the child ICPs.
Hutt City Council	50	Wellington Electricity has completed the field investigation of these lights and is working with the trader and council to determine where these will be reconciled.

Audit outcome

Compliant

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 manager 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 audit compliance reporting and the registry list were reviewed to determine compliance.

Audit commentary

All new ICPs created during the audit period had pricing information recorded on the registry prior to initial electrical connection.

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

The registry list was reviewed to identify all ICPs with GPS coordinates. Review of the registry list found there are 53 “active" ICPs with GPS co-ordinates recorded.

Audit commentary

GPS coordinates are optional, but if populated the registry requires New Zealand Transverse Mercator 2000 (NZTM2000) coordinates.

Wellington Electricity is now adding GPS co-ordinates if this is the only way to make an ICP readily locatable. Examination of the LIS file found 53 “active" ICPs with GPS co-ordinates recorded. I plotted these and found that they were not accurate. Wellington Electricity inadvertently used the NZMG co-ordinate format. This is being corrected and the NZTM co-ordinates will be used going forward.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.8 With: Clauses 7(8) and (9) Schedule 11.1 From: 01-Nov-22 To: 25-Sep-23	53 ICPs with the incorrect GPS co-ordinates. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are rated as strong now as the use of GPS co-ordinates has been clarified and is well understood. The audit risk is assessed to be low as the number of ICPs affected is small and is in the process of being corrected.

Actions taken to resolve the issue	Completion date	Remedial action status
Correct GPS coordinates on all ICP's to correct NZTM2000 format	Jun 2024	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Process notes for determining GPS coordinates to be updated to ensure correct format.	Apr 2024	

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

Processes to manage the "ready" status were reviewed.

The registry list and the audit compliance report for the period from 1 November 2022 to 25 September 2023 were examined to identify ICPs at "ready" status and check compliance.

Audit commentary

Unless an ICP is an embedded network gateway (LE) or shared unmetered load ICP (SI), GTV requires the ICPs to be moved to "ready" status before they are updated on the registry. Network extensions are rare, but if one is needed, the ICP will be manually created at "new" on the registry according to the working instructions document.

2,764 ICPs electrically connected during the audit period were updated to "ready" by the time they were electrically connected. Three ICPs were connected prior to the ICPs being created and moved to "ready" status as discussed in **section 3.4.**

All 97 ICPs at "ready" status have a proposed trader and a single price category recorded. Monitoring of ICPs at "ready" status is discussed in **section 3.14**.

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

Processes to manage the "distributor" status were reviewed.

The registry list, the NSP table as of 25 September 2023 and event detail report for 1 November 2022 to 25 September 2023 were reviewed to identify ICPs at "distributor" status and check compliance.

Audit commentary

The registry list showed 122 ICPs currently at "distributor" status. "Distributor" status is managed by the distributor and denotes that the ICP represents a shared unmetered load installation, or the point of connection between an embedded network and its parent network. As detailed in **section 4.6**, Wellington Electricity has created one shared unmetered load parent ICP and the remainder of the distributor status ICPs relate to LE ICPs for embedded networks.

As noted in **section 1.8,** there are currently 109 embedded networks connected to the Wellington Electricity network. The list file and NSP mapping table were compared and confirmed that there was at least one LE ICP per embedded network. I confirmed that LE ICPs were created as required for all embedded networks created during the audit period. This is discussed further in **section 3.1**.

LE ICP 1001145447UNFA7 associated with the one decommissioned embedded network was decommissioned in alignment with the embedded network's decommission date.

Audit outcome

Compliant

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

The decommissioning process was discussed.

The management of ICPs in relation to the use of the "decommissioned" status was examined. The list file and event detail report for the period from for 1 November 2022 to 25 September 2023 were examined in relation to the use of the "decommissioned" status.

Audit commentary

The decommissioning process starts with a service request for decommissioning from a trader. Northpower is dispatched to conduct the physical decommissioning and removal of the relevant connection. Once complete, the service request is closed in GTV, and the registry is updated.

If an ICP is identified as ready for decommissioning and a request has not been received from the trader, Wellington Electricity asks the trader for confirmation that the ICP is ready for decommissioning and to update the status on the registry.

Decommissioned statuses are included in the daily status match described in **section 2.1**. Where the trader has not already changed the status to "ready for decommissioning", they are contacted and asked to do so.

Examination of the list file found 11 ICPs pending decommission. All have since been decommissioned as part of BAU.

ICP 0000172627TRF32 recorded in the last audit as pending due to further remedial work required before it could be decommissioned has been decommissioned.

I checked a sample of typical sample of ten ICPS and confirmed that the decommissioning dates were correctly recorded.

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

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

The price category code table on the registry was examined.

Audit commentary

Wellington Electricity keeps the price category table up to date and has not created any new price category codes since 1 April 2020.

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

The loss category code table on the registry was examined.

Audit commentary

No new loss factors were created during the audit period.

Audit outcome

Compliant

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 in 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

No loss factors were updated during the audit period.

Only one factor is applied per calendar month. The loss factor review process is discussed in **section 8.1**.

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 give written notice to 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 give written notice to 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 give written notice to 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, the distributor must:

- *give written notice to the reconciliation manager,*
- *give written notice to the Authority,*
- *give written notice to 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 ten 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 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 give written notice to 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 was examined.

Processes to determine balancing areas were discussed.

Audit commentary

No balancing area changes have occurred during the audit period.

As detailed in the last two audits, until 30 April 2008, the network (then owned by UNET) had one balancing area per NSP. On 1 May 2008 UNET moved all the NSPs into a single balancing area WELLTONUNETG.

ICPs should only be in the same balancing area if an NSP within the balancing area could receive supply from at least one other NSP within the balancing area. If alternative supply is not possible between groups of NSPs, then separate balancing areas should be used.

The 2018 audit found it was likely that the Wellington Electricity Network should have more than one balancing area. This has not progressed due to the change of staff in Wellington Electricity's planning and asset team. I recommend below this is reviewed again in consultation with the Electricity Authority.

Recommendation	Description	Audited party comment	Remedial action
Balancing areas	Wellington Electricity reviews its balancing areas to ensure that ICPs are only in the same balancing area if an NSP within the balancing area could receive supply from at least one other NSP within the balancing area.	To discuss and determine if a review of balancing areas is to be progressed.	Investigating

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 give notice to the reconciliation manager at least one 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 examined.

Audit commentary

Wellington Electricity does not own any embedded networks and 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 give written notice to 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 was reviewed.

Audit commentary

No balancing area changes have occurred 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 give written notice to any trader trading at the ICP of the transfer at least one month before the transfer.

Audit observation

The NSP table was reviewed.

Audit commentary

No existing ICPs became NSPs during the audit period.

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 give written notice to the Authority in the prescribed form, no later than three business days before the transfer takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

Ten ICPs were transferred back to Wellington Electricity from the PHS0011 embedded network which was decommissioned on 31 May 2023. Notification is the responsibility of the embedded network owner in this instance.

Audit outcome

Compliant

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

Code reference

Clause 10.25(1) and 10.25(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)).*

For each NSP covered in 10.25(1) the network owner must, no later than 20 business days after a metering installation at the NSP is recertified advise the reconciliation manager of:

- *the reconciliation participant for the NSP,*
- *the participant identifier of the metering equipment provider for the metering installation,*
- *the certification expiry date of the metering installation.*

Audit observation

The NSP supply point table was examined.

Audit commentary

Wellington Electricity does not have responsibility for any NSP metering.

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 (cause 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 supply point table was reviewed.

Audit commentary

Wellington Electricity did not create any new NSPs 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 give written notice to:

- *the previous network owner (clause 29(1)(a) of Schedule 11.1),*
- *the reconciliation manager (clause 29(1)(b) of Schedule 11.1),*
- *the Authority (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 month's 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

Wellington Electricity have not initiated any changes of network owner during the audit period.

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 advise the reconciliation manager and the gaining MEP.

Audit observation

The NSP supply point table was examined.

Audit commentary

Wellington Electricity do not own any embedded networks therefore there have been no changes of MEP for embedded 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 Authority 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

Ten ICPs were transferred back to Wellington Electricity from the PHS0011 embedded network which was decommissioned on 31 May 2023. Notification is the responsibility of the embedded network owner in this instance.

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

The NSP supply point table was reviewed.

Audit commentary

Wellington Electricity has not initiated the transfer of any ICPs to an embedded network during the audit period.

The PHS0011 embedded network was decommissioned on 31 May 2023. All ten ICPs associated with this network were transferred back to Wellington Electricity.

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 give written notice to the registry manager 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 give written notice to the registry manager 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

Processes for the management of shared unmetered load were discussed. The registry list was reviewed to identify any ICPs with shared unmetered load connected.

Audit commentary

Review of the registry list found one parent shared unmetered load ICP has been created and the four child ICPs have all had shared unmetered load added correctly. Notification has been provided to the traders as required by this clause. Further shared unmetered load will be created if identified.

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 give written notice to all traders affected by that change or decommissioning as soon as practicable after the change or decommissioning.

Audit observation

Processes for the management of shared unmetered load were discussed. The registry list was reviewed to identify any ICPs with shared unmetered load connected.

Audit commentary

Review of the registry list confirmed that there have not been any changes to any shared unmetered load during the audit period.

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.*

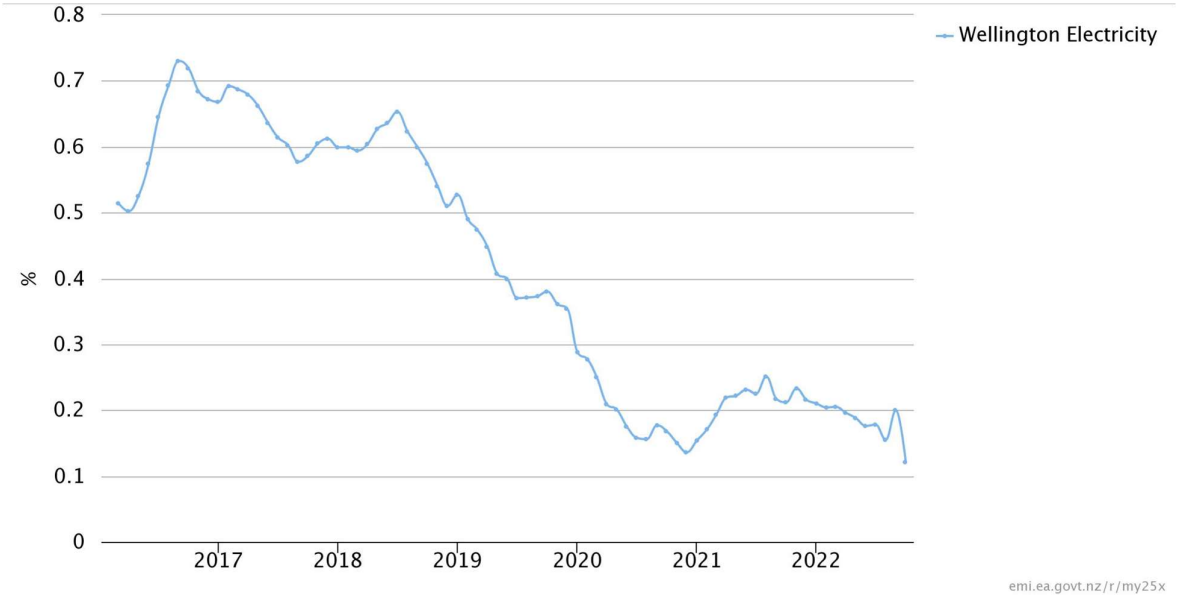
Audit observation

The "Guidelines on the calculation and the use of loss factors for reconciliation purposes" was published on 26 June 2018. I have assessed Wellington Electricity's process and compliance against the guideline's recommended thresholds.

Audit commentary

Wellington Electricity reviewed their loss factors in October 2018 in accordance with the Authority's guideline. The next five yearly review is in progress and is expected to be completed in early 2024.

The UFE graph for Wellington Electricity was downloaded from the Electricity Authority EMI website. This indicate losses are tracking within the +/- 1% threshold indicated in the guideline:



Audit outcome

Compliant

CONCLUSION

Wellington Electricity has made excellent progress in addressing the non-compliances found in the last audit, and this is reflected in the future risk rating score reducing from 20 to eight. Specifically:

- Gentrack is now able to manage shared unmetered load,
- good progress investigating the private lights provided by the local Councils; only one light has been confirmed as shared unmetered load and a parent ICP has been created and the shared unmetered load added to the relevant child ICPs, and
- no errors were found in the registry information confirming that BAU processes in place are robust.

There are some potential historic errors being investigated, which are detailed in the report. This includes reviewing the balancing areas for Wellington Electricity. ICPs should only be in the same balancing area if an NSP within the balancing area could receive supply from at least one other NSP within the balancing area. If an alternative supply is not possible between groups of NSPs, then separate balancing areas should be used. Work on this was undertaken in 2018, but due to staff changes over this time this has not been progressed and I have raised a recommendation that this be progressed.

The audit found seven non-compliances and makes four recommendations. This is decrease of five non-compliances from the 13 found in the last audit. 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 nine. This indicates a next audit frequency of 12 months. I have considered this in conjunction with Wellington Electricity's responses and agree with this recommendation.

I thank Sharlene and her team for all their help in getting this audit completed.

PARTICIPANT RESPONSE

Wellington Electricity have reviewed this report, and their comments are recorded in the body of the report. No further comments were provided.