

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**



For

WELLINGTON ELECTRICITY LINES LIMITED
NZBN: 9429035790433

Prepared by: Brett Piskulic

Date audit commenced: 27 September 2021

Date audit report completed: 31 January 2022

Audit report due date: 28 February 2022

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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 conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority. The audit was conducted remotely due to Covid 19 travel restrictions on 24th and 25th November 2021.

During the audit period Wellington Electricity added a daily download of the audit compliance report to its processes to identify discrepancies and improve data accuracy. This has resulted in a strengthening of controls and an improvement in compliance which is reflected in the result of this audit.

The audit found nine non-compliances and makes one recommendation. The indicative audit frequency table indicates that the next audit is in 12 months. I have considered this in conjunction with Wellington Electricity's responses and agree with this recommendation.

The matters raised are shown in the tables below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
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. Shared unmetered load has not been created to account for the shared unmetered load on the network. One ICP with a mis-mapped NSP.	Strong	Low	1	Identified
Requirement to correct errors	2.2	11.2(2) and 10.6(2)	Correction of some data not carried out as soon as practicable.	Moderate	Low	2	Identified
Distributors must create ICPs	3.1	11.4	Shared unmetered load ICPs not created to account for shared unmetered streetlights connected on the network.	Moderate	Low	2	Identified
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.	Strong	Low	1	Identified
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	112 late initial electrical connection updates.	Strong	Low	1	Identified
Changes to registry information	4.1	8 Schedule 11.1	2,641 late pricing updates. 129 late status updates. 3 late network updates. 95 late distributed generation updates.	Moderate	Low	2	Identified
Notice of NSP for each ICP	4.2	7(1),(4) and (5) Schedule 11.1	13 ICPs with the incorrect NSP recorded.	Strong	Low	1	Identified
ICP location address	4.4	2 Schedule 11.1	20 active ICPs without a readily locatable address.	Strong	Low	1	Identified
Distributors to Provide ICP Information to the Registry manager	4.6	7(1) Schedule 11.1	1 LE ICP with the NSP dedication set to No. 1 ICP with the NSP dedication set to Yes. 2 ICPs with distributed generation present and the incorrect installation type of "L".	Strong	Low	1	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			8 incorrect initial electrical connection dates recorded. 7 ICPs with the incorrect unmetered load details recorded. Shared metered load present but not recorded on the registry.				
Future Risk Rating						12	

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 Initial Electrical Connection Date	3.5	Clause 7(2A) Schedule 11.1	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.

ISSUES

Subject	Section	Issue	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

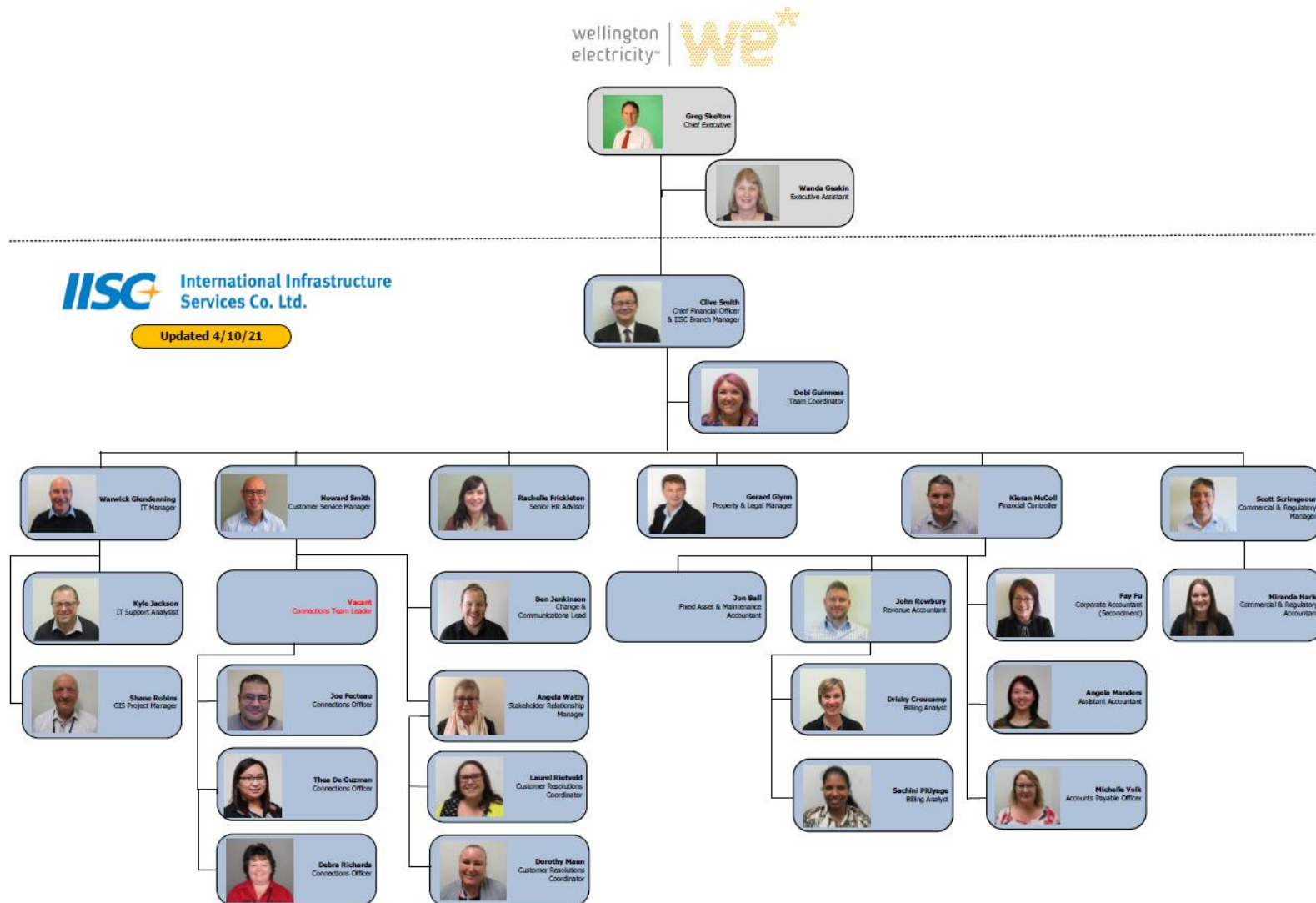
The Authority website was checked to determine whether there are code exemptions in place.

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 15 October 2021:



1.3. Persons involved in this audit

Auditor:

Brett Piskulic

Veritek Limited

Electricity Authority Approved Auditor

Personnel assisting in this audit were:

Name	Title
Howie Smith	Customer Service Manager
Joe Fecteau	Connections Officer
Thea De Guzman	Connections Officer
Debra Richards	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 engages Northpower to conduct field services on their network. 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 engages Northpower to conduct all field services on their network.

1.6. Hardware and Software

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
- **SIAS** (GIS), which is used to identify the correct NSP and address information.

The SIAS, Gentrack, and SAP databases and servers are all backed up to CommVault disk media, which are then transferred to tape and stored off site.

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 2020 audit.

Dist	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
CKHK	CPK0111	Central Park			WELLTONUNETG	G	1/02/09	7,017
CKHK	CPK0331	Central Park			WELLTONUNETG	G	1/02/09	42,173
CKHK	GFD0331	Gracefield			WELLTONUNETG	G	1/02/09	19,298
CKHK	HAY0111	Haywards			WELLTONUNETG	G	1/02/09	6,814
CKHK	HAY0331	Haywards			WELLTONUNETG	G	1/02/09	5,378
CKHK	KWA0111	Kaiwharawhara			WELLTONUNETG	G	1/02/09	5,619
CKHK	MLG0111	Melling			WELLTONUNETG	G	1/02/09	8,009
CKHK	MLG0331	Melling			WELLTONUNETG	G	1/02/09	12,191
CKHK	PNI0331	Pauatahanui			WELLTONUNETG	G	1/02/09	6,806
CKHK	TKR0331	Takapu Road			WELLTONUNETG	G	1/02/09	34,190
CKHK	UHT0331	Upper Hutt			WELLTONUNETG	G	1/02/09	11,538
CKHK	WIL0331	Wilton			WELLTONUNETG	G	1/01/14	12,702

Networks embedded under Wellington Electricity NSPs

Wellington Electricity does not own any embedded networks. There are 97 embedded networks connected to the Wellington Electricity network.

Four new embedded networks were created after September 2020. 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	End date
TENC	TCS0011	11 Church Street Wellington	CPK0331	CKHK	TCS0011TENCE	E	1/06/2021	
TENC	TMA0011	123 Molesworth St Wellington	KWA0111	CKHK	TMA0011TENCE	E	22/04/2021	
TENC	TPA0011	Pinnacle Apartments Wellington	CPK0111	CKHK	TPA0011TENCE	E	1/08/2021	
TENC	TVN0011	City Lodge Apartments Wellington	CPK0331	CKHK	TVN0011TENCE	E	13/10/2021	

ICP status

Wellington Electricity's ICPs are summarised by status below:

Status	Number of ICPs (2021)	Number of ICPs (2020)	Number of ICPs (2019)	Number of ICPs (2018)	Number of ICPs (2017)
New (999)	-	-	-	2	85
Ready (000)	187	132	142	86	46
Active (2,0)	171,735	170,428	168,737	167,633	166,696
Distributor (888)	111	108	101	96	85
Inactive - new connection in progress (1,12)	312	317	177	155	56
Inactive - vacant (1,4)	2,569	2,539	2,564	2,694	2,568
Inactive - AMI remote disconnection (1,7)	886	808	813	781	486
Inactive - de-energised due to meter disconnected (1,8)	19	20	15	10	8
Inactive - at pole fuse (1,9)	36	32	30	30	13
Inactive - de-energised at meter box switch (1,10)	9	10	8	11	2
Inactive - at meter box switch (1,11)	4	8	5	4	4
Inactive - ready for decommissioning (1,6)	22	16	10	174	378
Inactive – reconciled elsewhere (1,5)	2	1	-	-	-
Decommissioned (3)	9,203	8,471	7,757	6,926	6,123

1.9. Authorisation Received

An email of authorisation was provided.

1.10. Scope of Audit

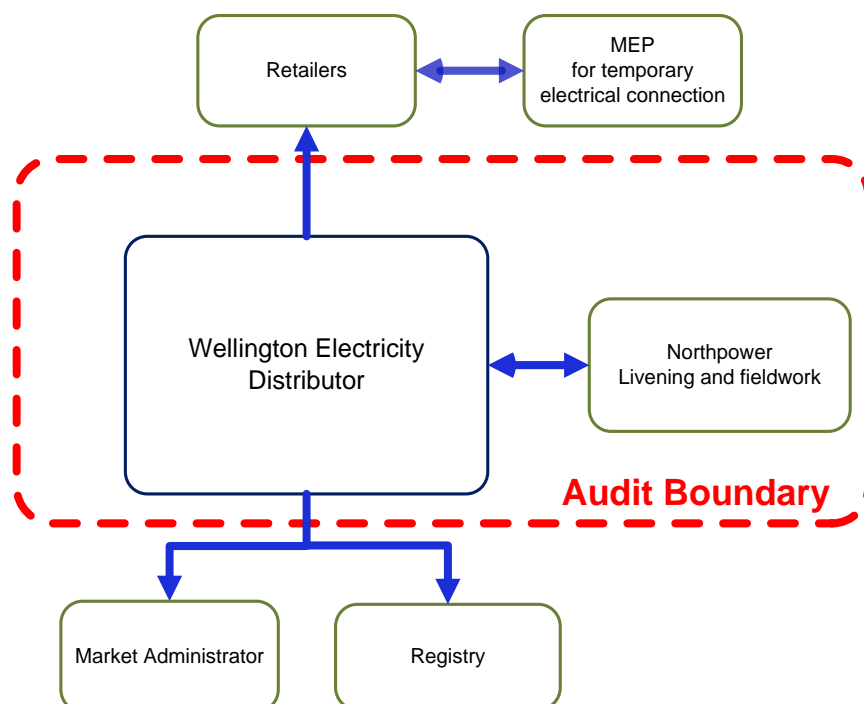
This Distributor audit was performed at the request of Wellington Electricity, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority. The audit was conducted remotely due to Covid 19 travel restrictions on 24th and 25th November 2021.

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.



1.11. Summary of previous audit

Wellington Electricity provided a copy of the previous audit report, completed in December 2020 by Rebecca Elliot of Veritek Limited. The audit found eight non-compliances and made four recommendations. The findings 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. Shared unmetered load has not been created to account for the shared unmetered load on the network. One ICP of the sample of ten ICPs checked with a mis-mapped NSP.	Still existing
Requirement to correct errors	2.2	11.2(2) and 10.6(2)	Correction of some data not carried out as soon as practicable.	Still existing
Distributors must create ICPs	3.1	11.4	Shared unmetered load ICPs not created to account for shared unmetered streetlights connected on the network.	Still existing
Provision of ICP information to the registry	3.3	11.7	Initial electrical connection date not populated for ICP 0000162828CK0A3.	Cleared
Timeliness of provision of information to the registry	3.4	7(2) of Schedule 11.1	12 ICPs updated to “ready” after electrical connection.	Cleared
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	297 late initial electrical connection updates.	Still existing
Changes to registry information	4.1	8 Schedule 11.1	5 late addresses updates. 749 late pricing updates. 94 late status updates. 81 late network updates. 174 late distributed generation updates.	Still existing
Notice of NSP for each ICP	4.2	7(1),(4) and (5) Schedule 11.1	One ICP of ten ICPs checked with the incorrect NSP recorded.	Still existing
ICP location address	4.4	2 Schedule 11.1	24 active ICPs without a readily locatable address.	Still existing

Subject	Section	Clause	Non-Compliance	Status
Distributors to Provide ICP Information to the Registry manager	4.6	7(1) Schedule 11.1	<p>15 ICPs with the NSP dedication set to Yes.</p> <p>20 ICPs with distributed generation present and the incorrect installation type of "L".</p> <p>Some incorrect initial electrical connection dates recorded (2 from the current audit period and the remaining all relate to prior to the requirement coming into effect).</p> <p>Four ICPs with the incorrect unmetered load details recorded.</p> <p>Shared metered load present but not recorded on the registry.</p>	Still existing

Table of Recommendations:

Subject	Section	Recommendation	Status
Provide complete and accurate information	2.1	Use the AC020 (Audit compliance reporting) to assist with the identification and management of potential data discrepancies.	Cleared
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.	Still existing
Distributors to Provide ICP Information to the Registry manager	4.6	<p>Where EG or injection flow metering has been installed and no application for generation has been received, investigate whether generation is present by:</p> <ol style="list-style-type: none"> 1. Checking the EIEP1/3 reports provided by traders to determine whether the EG registers are recording consumption. 2. Checking the high risk database (/www.energysafety.govt.nz/energysafety/app/highrisk-db/home) for the address, to determine whether generation has been installed. <p>Follow up ICPs with approved applications, which do not have EG or injection flow metering installed within three months with the trader.</p>	Cleared
		Investigate if distributed generation is present on the three ICPs where the trader indicates it is present and Wellington Electricity has none.	Cleared

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 27 September 2021 and the registry audit compliance report covering the period from 1 October 2020 to 27 September 2021 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 found it was rare for updates to be held.

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. In the last audit it was recommended that the audit compliance reports are used as well to assist with the identification of potential errors. Wellington Electricity has adopted this recommendation and downloads the audit compliance report daily to identify discrepancies. This has led to a further improvement in the level of data accuracy and compliance found in this audit. There were a small number of data discrepancies found in this audit and some corrections have not been completed from the last audit. The areas to be addressed are detailed below:

Shared unmetered load

The creation of shared unmetered load ICPs was examined. In the last audit it was recorded that shared unmetered load has been identified from the Hutt, Porirua and Wellington City Councils and the details for these lights have been provided to Wellington Electricity with the first lights being provided in 2017. This has not been able to be progressed as the changes being made in Gentrack are yet to be completed.

It is expected that the changes should be completed in 2022 and work will begin creating the shared unmetered load.

NSP Dedication

One ICP was assigned the dedicated flag incorrectly and one LE ICP was assigned the non-dedicated flag incorrectly. This is detailed in **section 4.6**.

NSP assignment

The audit compliance report identified 67 ICPs with potentially mis-mapped NSPs. Wellington Electricity have improved their process for identifying mis-mapped ICPs with the addition of the AC020 report. A “streets with multiple NSP” spreadsheet was provided which confirmed that 54 of the 67 identified were assigned to the correct NSP. Of the remaining 13, 12 have been corrected and one is undergoing further investigation before a change is made.

This is detailed in **section 4.2**.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 11.2(1) and 10.6(1) From: 01-Oct-20 To: 25-Nov-21	A small number of discrepancies and some corrections from the last audit still to be corrected. Shared unmetered load has not been created to account for the shared unmetered load on the network. One ICP with a mis-mapped NSP. 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 as there has been an improvement in registry accuracy with the introduction of additional processes to identify discrepancies. The audit risk rating is low as the data discrepancies identified have little or no impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
Shared Unmetered Load: Work with Gentrack to resolve shared unmetered load functionality. NSP Assignment: One outstanding ICP to be remedied	01/12/2022 31/03/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
NSP Dedication: Parameter to be added in the daily health check process	31/03/2022	

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 27 September 2021 and the registry audit compliance report covering the period from 1 October 2020 to 27 September 2021 were examined to confirm compliance.

Audit commentary

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**. Overall, Wellington Electricity have made good progress and continue to improve data accuracy. Not all corrections have been processed during the audit period as soon as practicable.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.2 With Clause 11.2(2) From: 01-Nov-18 To: 25-Nov-21	Correction of some data not carried out as soon as practicable. Potential impact: Low Actual impact: Low Audit history: Three times previously Controls: Moderate Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating

Low	<p>The controls are rated as moderate overall, but the non-compliance remains as shared unmetered load has not been resolved for a number of years.</p> <p>The risk is rated as low, as the impact of the shared unmetered load not being reconciled is minor.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Continue to work through resolving historical data errors. Expected to clear the majority of errors in the next calendar year.		01/12/2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Shared Unmetered Load: Work with Gentrack to resolve shared unmetered load functionality. If shared unmetered load functionality is delivered earlier than the target completion date, we will pilot the application of shared unmetered load to a small number of ICPs.		01/12/2022 01/12/2022	

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

Code reference

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

Code related audit information

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

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

- *ensure 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 about Utilities Disputes is prominently and cleared displayed on the Wellington Electricity Website and is included in email footers.

Training has been provided to call centre staff and a pre-recorded message is played to consumers advising about Utilities Disputes.

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

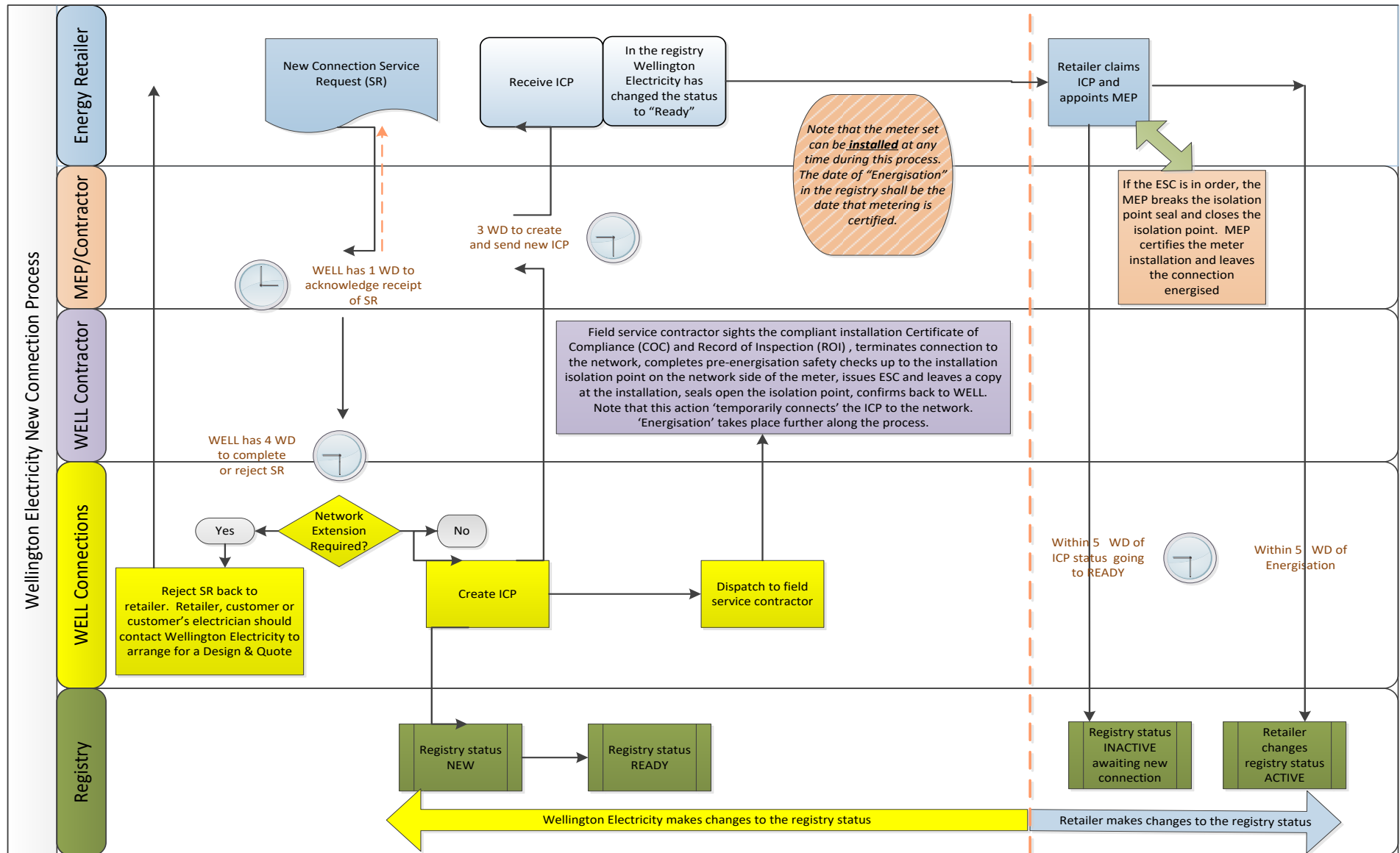
The new connection process was examined in detail and is described in **section 3.2**. 20 new connection applications of the 2,341 created were sampled using diverse characteristic methodology from the point of application through to when the ICP was created. This included two ICPs with distributed generation associated and three unmetered load ICPs.

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:



Review of the sample of 20 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.

The creation of shared unmetered load ICPs was examined. In the last audit it was recorded that shared unmetered load has been identified from the Hutt, Porirua and Wellington City Councils and the details for these lights have been provided to Wellington Electricity with the first lights being provided in 2017. This has not been able to be progressed as the changes being made in Gentrack are yet to be completed. It is expected that the changes should be completed in early 2022 and work will begin creating the shared unmetered load. This is recorded as non-compliance below and in **sections 2.1, 2.2 and 4.6**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.1 With: Clause 11.4 From: 31-Dec-17 To: 25-Nov-21	Shared unmetered load ICPs not created to account for shared unmetered streetlights connected on the network. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I rate the controls as moderate due to the lack of process to create shared unmetered load ICPs. The risk is rated as low, as the impact of the shared unmetered load not being reconciled is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Shared Unmetered Load: Work with Gentrack to resolve shared unmetered load functionality. If shared unmetered load functionality is delivered earlier than the target completion date, we will pilot the application of shared unmetered load to a small number of ICPs.		01/12/2022 01/12/2022	

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 20 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 is unchanged from the previous audit, and is as follows:

1. 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.
2. 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.
3. The data entered into SAP is validated, including manual checks for incomplete information and duplicate addresses. Any applications with incomplete or duplicate information are held, and a request for further information is sent to the trader.
4. The transformer, which corresponds to the NSP, is added manually after checking SIAS (GIS) to confirm the transformer the ICP will be connected to. A weekly report of new or changed NSPs is obtained from SIAS and matched to Northpower's records to confirm that the correct transformers are recorded for new ICPs.
5. GTV automatically generates an ICP identifier once all of the relevant new connection information is loaded.
6. 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 for the affected ICP. 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.
7. The trader and Northpower are then both notified of the details of the newly created ICP.

A sample of 20 new connections were checked, including three ICPs with unmetered load and two with distributed generation recorded. 18 of the 20 were created within three business days of the trader providing all the information required for the new connection application. There were two ICPs that were not created within three business days and there was no correspondence with the retailer advising of the delay. ICP 0000166281CKA67 was created after six business days and ICP 0000166296CKD00 which was created after four business days.

Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 3.2 With: Clause 11.5(3) From: 09-Jul-21 To: 15-Jul-21	Two ICPs not created within three business days and notification not provided to the participant. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong; these two notifications appear to be one-off issues. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
			Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Requests for ICP creation: Investigation of a system to tag and highlight requests for new ICPs, which are about to exceed the required timeframe for creation. Requests for ICP creation: Amend process to ensure notification to retailer is consistently performed if delay of creation is possible.		30/06/2022 31/01/2022	

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 October 2020 to 27 September 2021 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.

All new connections were updated to “ready” prior to trading.

Audit outcome

Compliant

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

The distributor must provide the information specified in subclause (1)(p) to the registry manager no later than 10 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 October 2020 to 27 September 2021 were examined to determine the timeliness of the provision of the initial electrical connection date.

A sample of 20 late updates (ten were a typical example and ten were an extreme example) were checked to determine why they were delayed.

Audit commentary

Wellington Electricity does not normally carry out electrical connection on their network. Approved contractors complete all electrical connection on behalf of traders, and Northpower installs and tests the connection either before or after metering is installed. In almost all cases, the ICP is electrically connected by the trader.

Wellington Electricity wait for the MEP to load the metering to the registry and then use this as the initial electrical connection date as they do not receive any paperwork back from the trader’s MEP. The

meter is not always certified at the same time as livening so the initial electrical connection date may not always be accurate. The accuracy of these dates is discussed in **section 4.6**. I repeat the recommendation from the previous audit that Wellington Electricity require anyone working on their network who is electrically connecting an ICP to provide them with this information. This will give them an independent source of information. Where the new connection occurs downstream of Wellington Electricity's network, I recommend that the trader is contacted, and the livening paperwork is requested.

Recommendation	Description	Audited party comment	Remedial action
Clause 7(2A) Schedule 11.1 Timeliness of provision of initial electrical connection date	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.	Enter dialogue with MEPs to identify possible options for providing livening information to WE	Identified

Since the last audit Wellington Electricity has added a process where the AC020 report is used to identify discrepancies.

There were 3,057 initial electrical connection date updates in the event detail report. The audit compliance report identified 112 (3.67%) late updates. These were examined and found that the late updates examined in the typical sample were due to the reliance on the MEP to populate the metering information and this has caused the late population of the initial electrical connection date. The extreme sample checked found that these were due to the removal of the incorrectly populated initial electrical connection dates to the registry, which have been removed from the registry but not removed from Gentrack. In these instances, any subsequent network change is repopulating the initial electrical connection date, and these appear as backdated updates. There is an on-going project underway to remove the incorrect initial electrical connection dates from Gentrack.

Late updates are recorded in a breach spreadsheet, which records the details of the update and the reason it was late. This enables Wellington Electricity to identify any trends (such as late updates to "active" status for a particular trader leading to late initial electrical connection date population) and take corrective action as necessary.

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-Oct-20 To: 27-Sep-21	112 late initial electrical connection 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	<p>Controls are rated as strong. Improvements were made during the audit period with the addition of the use of the AC020 report.</p> <p>The impact is assessed to be low as the majority of dates are populated in the required timeframe.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Late population of IEDs: Continue to work through resolving historical data errors. Expected to clear the majority of errors in the next calendar year.		01/12/2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Livening Paperwork: Enter dialogue with MEPs to identify possible options for providing livening information to WE		31/05/2022	

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 October 2020 to 27 September 2021 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.

The audit compliance report confirmed that no ICPs were electrically connected prior to being made “ready” on the registry.

Review of the registry list confirmed that shared unmetered load is not recorded for ICPs on Wellington Electricity’s network. Wellington Electricity have not been able to progress the creation of the shared unmetered load as the changes being made in Gentrack are yet to be completed. It is expected that the changes should be completed in early 2022 and work will begin creating the shared unmetered load. This is recorded as non-compliance in **sections 2.2** and **3.1**.

Audit outcome

Compliant

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 October 2020 to 27 September 2021 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.

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 October 2020 to 27 September 2021 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. No temporarily connected ICPs were identified.

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:

xxxxxxxxxxccc where:

- *xxxxxxxxxx is a numerical sequence provided by the distributor*
- *xx is a code that ensures the ICP is unique (assigned by the Authority to the issuing distributor)*
- *ccc is a checksum generated according to the algorithm provided by the 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, and Wellington Electricity’s published 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 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 October 2020 to 27 September 2021 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 four ICPs that have been at the “ready” status for more than 24 months. These were checked and found that three ICPs are no longer required and have been “decommissioned - set up in error”. The remaining ICP has been changed to “decommissioned - installation dismantled” after an investigation found that an unauthorised meter had been installed by a contractor and the trader had changed the status to active.

Wellington Electricity monitors ICPs at the “ready” status using a daily download of the AC020 report, this process was added following a recommendation in the last audit.

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 28 October 2021 and registry list were reviewed to identify any generation stations with capacity of 10 MW or more; and 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.

Where a new ICP is created, Wellington Electricity's new connection process described in **sections 3.1** and **3.2** applies.

Where a new ICP is not required, a new connection job must be logged by the trader on behalf of the customer. As part of this process the trader gives their consent for the circuit to be connected.

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 10 business days, the notification must be provided no later than the 13th business day and be backdated to the date the change took effect.

In the case of decommissioning an ICP, notification must be given by the later of 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.

Audit observation

The management of registry updates was reviewed.

The registry list and the audit compliance report for the period from 1 October 2020 to 27 September 2021 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	2019	8	99.8%	N/A
	2020	5	99.92%	0.07
	2021	0	100%	N/A
Price codes	2019	75	98.1%	N/A
	2020	749	98.09%	1.43
	2021	2,641	98.26%	N/A

Update	Date	Late	% Compliant	Average days
Status	2019	28	95.6%	-
	2020	94	82.95%	2.89
	2021	129	81.98%	N/A
Network (excl. new connection & Distributed Generation)	2020	81	N/A	N/A
	2021	3	N/A	N/A
Distributed Generation	2020	174	55.41%	27.63
	2021	95	58.14%	N/A
NSP changes	2020	0	100%	N/A
	2021	0	100%	N/A

Address events

All address updates were provided within three business days.

Pricing events

152,044 pricing updates were identified. 2,641 of these (1.74%) were updated more than three business days after the event. 1,954 of the late updates were updated on the fourth business day. Wellington Electricity updates price codes after receiving and processing of EIEP8 files from the traders. The majority of updates done on the fourth day relate to EIEP8 files that were received late on the third business day but not processed until the fourth business day.

The sample of 30 ICPs checked included a typical sample of 25 ICPs and an extreme example of five ICPs. This found for the typical sample that these were backdates to the date requested by the trader as they were corrections. The extreme sample found that these related to either corrections or the late closing of a service request from a BTS to permanent supply causing the associated pricing request to be backdated.

Network events

There were three late network events, excluding NSP and DG changes. All three related to the correction of unmetered load details.

Distributed Generation events

The distributed generation process is described in **section 4.6**.

227 distributed generation updates were identified. 95 of these were updated more than three business days after the event.

Wellington Electricity has added additional checks using the AC020 report and consumption data to identify the date that distributed generation has been installed but this continues to be challenging.

A typical sample of 13 ICPs and an extreme sample of all six ICPs with updates later than 42 business days were examined. Examination of the typical sample found,

- 11 were due to reliance on metering updates which were later than three business days,
- one was due to discrepancies in ICP and address information in DG application, and
- one late update due to BAU delay over holiday period.

The extreme sample found that these all related to updates dated back to 2013 and 2014 after communication with retailers to obtain details of installed distributed generation.

Status events

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

There were 716 status updates to decommissioned identified, of which 587 (81.98%) were updated within three business days. 129 ICPs were updated later than three days after the event. 98 of the late updates relate to one site where an entire apartment block was decommissioned and there was a delay in getting confirmation of the actual date of decommissioning. A typical sample of 15 ICPs was examined for the remaining 31 ICPs and found,

- 11 were due to late notification by traders, and
- four were due to late notification from the field.

NSP changes

The audit compliance report recorded 28 late NSP changes. These were examined and found that they were all due to corrections of initial electrical connection dates. Therefore, there were no late NSP updates.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Oct-20 To: 27-Sep-21	2,641 late pricing updates. 129 late status updates. 3 late network updates. 95 late distributed generation updates. 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 as the data discrepancies identified have little or no impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
		Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
Late status changes: Change decommission process to improve the timeliness of status updates.	30/06/2022	

4.2. 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 67 active ICPs where 10% or fewer ICPs on a street have a different NSP. All 67 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 SIAS (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 SIAS and matched to Northpower's records to confirm that the correct transformers are recorded for new ICPs.

Wellington Electricity have improved their process for identifying mis-mapped ICPs with the addition of the AC020 report. A "streets with multiple NSP" spreadsheet was provided which confirmed that 54 of the 67 identified were assigned to the correct NSP. Of the remaining 13, 12 have been corrected and one is undergoing further investigation before a change is made.

Audit outcome

Non-compliant

Non-compliance	Description
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Audit Ref: 4.2 With: Clauses 7(1), (4) and (5) Schedule 11.1 From: 01-Oct-20 To: 27-Sep-21	13 ICPs with the incorrect NSP recorded. 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	Controls are rated as strong as Wellington Electricity processes demonstrated robust controls. The risk rating is low as Wellington Electricity has one balancing area and therefore an incorrect NSP has no direct impact on reconciliation.	
Actions taken to resolve the issue	Completion date	Remedial action status
NSP Assignment: One outstanding ICP to be remedied	31/03/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

The distributor must advise a customer (or any person authorised by the customer) or embedded generator of the customer or embedded generator's ICP identifier within 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

4.4. 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 27 September 2021 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 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. It is possible to override the GTV warning message and continue with the duplicate address.

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 recorded 63 active ICPs where the address not readily locatable. Wellington Electricity checked these and provided the following details:

- 43 have since had details added to the address to make them readily locatable, and
- Wellington Electricity have requested address details from the trader for the remaining 20 ICPs and will update these when they are returned.

Wellington Electricity have improved their processes for identifying active ICPs with addresses that do not have readily locatable addresses with the addition of the AC020 report.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.4 With: Clauses 2 Schedule 11.1 From: 01-Oct-20 To: 27-Sep-21	20 active ICPs without a readily locatable address. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	Controls are rated as strong as Wellington Electricity processes demonstrated robust controls. The audit risk is assessed to be low as only 20 active ICPs have addresses not readily locatable.

Actions taken to resolve the issue	Completion date	Remedial action status
ICP Location Address: Work ongoing to resolve majority of remaining issues.	30/06/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	

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 SIAS (GIS) to confirm the network configuration meets the requirements of this clause.

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 October 2020 to 27 September 2021 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.

NSPs

The NSP dedication flag was checked.

All LE ICPs were checked, and I confirmed that all with the exception of one had a dedicated NSP flag. ICP 1001150918CK6C5 had been changed to non-dedicated and this has now been corrected to dedicated.

There is only one balancing area for the Wellington Electricity network. All but one active ICP have the dedicated flag set to "N". The ICP with a dedicated NSP flag, 1001148126CK74A, was checked and found to have the incorrect dedication flag applied and has now been corrected to non-dedicated.

Assignment of NSPs was reviewed in **section 4.2**.

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.

Since the last audit Wellington Electricity has added a process where the AC020 report is used 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 showed an increase in the number of active ICPs with distributed generation:

Year	ICPs with distributed generation
2016	338
2017	460
2018	816
2019	1,102

Year	ICPs with distributed generation
2020	1,487
2021	1,671

The audit compliance report identified four ICPs where the profile used by the trader indicates that distributed generation is present, but Wellington Electricity has none recorded. These were examined and found:

- ICP 0000043289TRC57 is a long-standing issue where no application for installation of distributed generation has been received. Wellington Electricity has followed up with the trader, initially Genesis and subsequently Powershop, but has been unable to obtain details of the installation,
- ICP 0000162886CKB27, contact has been made with the customer and it has been confirmed that the distributed generation installation has not been completed; the trader has been requested to update the registry,
- 0000165878CKCCB, the retailer has confirmed that no distributed generation has been installed; the registry information has been corrected, and
- 0000166086CKDAA, an application for installation of distributed generation has been received but there was an error with the address and ICP in the application form; the trader has been requested to confirm the details.

Initial electrical connection dates

The audit compliance reporting identified 11 ICPs with date inconsistencies between the initial electrical connection date, the active date and the meter certification date. These were examined and found:

- two ICPs had a date consistent with the traders first active date and the metering was certified later,
- two had dates that were inconsistent with the meter certification date and the traders first active date, I have recorded non-compliance for these two (both have since been corrected),
- one had a date consistent with the meter certification date and the traders first active date was later and is incorrect and has since been corrected, and
- six had IECD and active dates which were after the meter certification date; three of these were recorded as inactive-electrically disconnected between the meter certification date and active date, however I have recorded non-compliance for all these six ICPs as the initial electrical connection occurred when meter certification took place.

The audit compliance report confirmed that all ICPs had initial electrical connection dates populated since the requirement came into effect. Wellington Electricity has implemented the use of the AC020 report to identify and resolve ICPs with missing initial electrical connection dates.

Examination of the list file found 22 ICPs at “inactive - new connection in progress” with an initial electrical connection date populated. All 22 of these were checked and found all were correctly populated and the trader has since made all except three of these “active”.

Examination of the list file confirmed that there are now no active ICPs with the initial electrical connection dates populated prior to 29 August 2013. A data cleansing project has removed the 27,149 that were identified in the last audit.

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.

Unmetered load details format

835 active ICPs have a value in the Unmetered load details – Distributor field, a small increase from the 831 active ICPs recorded in 2020. GTV stores unmetered load details as an installation fixture. The load is entered into GTV in watts and is automatically converted to kW to two decimal places with “kW” as a suffix. For the more recent unmetered loads the burn hours are included.

Trader unmetered load is recorded without distributor unmetered load

Review of the registry list found 50 active ICPs where the trader had unmetered load recorded, but Wellington Electricity had no unmetered load recorded. The code requires the load to be recorded “if known”. Of the 50 ICPs, 39 are historic and were connected prior to 2013. Wellington Electricity are liaising with the trader to confirm the unmetered load details for the remaining 11 ICPs.

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

835 active ICPs have a value recorded in the distributor unmetered load details field. I compared the figures for the 329 ICPs where the format of the distributor information enabled recalculation, and a trader unmetered load value was populated. For 296 ICPs Wellington Electricity’s value matched the trader’s value within ± 1 kWh. I found some small differences were caused by GTV’s rounding of wattage to kW with two decimal places. The 20 ICPs with differences over ± 1 kWh were examined during the audit and found:

- Wellington Electricity is liaising with the trader to confirm the correct details for 13 of these ICPs,
- the distributor unmetered load has been updated to match the retailer unmetered load for four ICPs, and
- three ICPs have been confirmed as requiring updating following correspondence with trader.

Shared unmetered load

Shared unmetered load has been identified from the Hutt, Porirua and Wellington City Councils and the detail for these lights have been provided Wellington Electricity with the first lights being provided in 2017. This has not been able to be progressed as the changes being made in Gentrack are yet to be completed. It is expected that the changes should be completed in early 2022 and work will begin creating the shared unmetered load. This is recorded as non-compliance below, and in **sections 2.2 and 3.1**.

Audit outcome

Non-compliant

Non-compliance	Description
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<p>Audit Ref: 4.6</p> <p>With: Clause 7(1) Schedule 11.1</p> <p>From: 01-Oct-20</p> <p>To: 27-Sep-21</p>	<p>1 LE ICP with the NSP dedication set to No.</p> <p>1 ICP with the NSP dedication set to Yes.</p> <p>2 ICPs with distributed generation present and the incorrect installation type of “L”.</p> <p>8 incorrect initial electrical connection dates recorded.</p> <p>7 ICPs with the incorrect unmetered load details recorded.</p> <p>Shared metered load present but not recorded on the registry.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as strong as there has been an improvement in registry accuracy with the introduction of additional processes to identify discrepancies.</p> <p>The audit risk rating is low as the data discrepancies identified have little or no impact on reconciliation.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>NSP: Parameter to be added in the daily health check process.</p> <p>Unmetered Load Details Format: Continue to work with Gentrack to fix how Unmetered details are reported to Registry.</p> <p>Unmetered Load Discrepancies: Continue to work with Retailers to resolve.</p>		<p>31/03/2022</p> <p>01/12/22</p> <p>30/06/2022</p>	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Shared Unmetered Load: Work with Gentrack to resolve shared unmetered load functionality.</p> <p>If shared unmetered load functionality is delivered earlier than the target completion date, we will pilot the application of shared unmetered load to a small number of ICPs.</p>		<p>01/12/2022</p> <p>01/12/2022</p>	

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 three 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.

The three active ICPs with GPS co-ordinates recorded are in the correct format.

Audit outcome

Compliant

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 October 2020 to 27 September 2021 were examined to identify ICPs at “ready” status and check compliance.

Audit commentary

Unless an ICP is an embedded network gateway (LE), 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.

All 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**.

All ICPs electrically connected during the audit period were updated to “ready” by the time they were electrically connected, as discussed in **section 3.4**.

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 1 October 2021 and event detail report for 1 October 2020 to 27 September 2021 were reviewed to identify ICPs at “distributor” status and check compliance.

Audit commentary

The registry list showed 111 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. Wellington Electricity does not record any shared unmetered load, all the ICPs with distributor status relate to LE ICPs for embedded networks. Shared unmetered load is discussed further in **section 2.1**.

As noted in **section 1.8**, there are currently 97 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**.

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 registry list, the event detail report and audit compliance report for the period from 1 October 2020 to 27 September 2021 were reviewed to identify ICPs at “decommissioned” or “ready for decommissioning” status and check compliance.

A typical sample of ten “decommissioned” ICPs and all 22 ICPs at “ready for decommissioning” status were examined to determine compliance.

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 22 ICPs pending decommission. 12 of these relate to unmetered loads where Genesis Energy is the retailer. All 12 of these were examined and found that all are long term vacant ICPs (last active in 2002) that have been moved to “ready to decommission” by Genesis. Wellington Electricity are continuing to liaise with Genesis to confirm details before these are decommissioned. The remaining 10 ICPs had all been moved to “decommissioned” status at the time of the audit.

A further ten decommissioned ICPs were reviewed to confirm whether the ICP was inactive and ready for decommissioning prior to being decommissioned. In all cases, the ICPs were genuinely ready for decommissioning at the time they were decommissioned, and the appropriate decommissioned code was applied.

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 (a "transfer"), 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 10 business days before the NSP is electrically connected, in respect of an NSP that is an interconnection point between two local networks. In all other cases, the request must be made at least one 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. Wellington Electricity's asset and planning team have reviewed its balancing area groupings. The proposed changes have been shared with the Electricity Authority who have recommended that they consult with traders on the proposed changes and to then liaise with the Electricity Authority again so they can manage the reconciliation process to minimise disruption to the industry.

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

12 ICPs were transferred to Wellington Electricity from an embedded network, TWL0011, NSP TOX0011 to NSP CPK0331 on 1st December 2020. Wellington Electricity provided copies of the application form and DS-010 file which was provided to the Authority on 17th November 2020.

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 (Clause 10.25(2)(b)(ii)); and*
 - c) *no later than 20 business days after the data of certification of each metering installation, advise the reconciliation participant for the NSP of the certification expiry date (Clause 10.25(2)(c)).*

Audit observation

The NSP 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

12 ICPs were transferred to Wellington Electricity from an embedded network, TWL0011, NSP TOX0011 to NSP CPK0331 on 1st December 2020. Wellington Electricity provided copies of the application form and DS-010 file which was provided to the Authority on 17th November 2020. The application form included confirmation of written consent from the traders.

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.

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 confirmed that shared unmetered load is not currently recorded for any ICPs on Wellington Electricity's network. The creation of shared unmetered load ICPs was examined. In the last audit it was recorded that shared unmetered load has been identified from the Hutt, Porirua and Wellington City Councils and the detail for these lights have been provided to Wellington Electricity with the first lights being provided in 2017. This has not been able to be progressed as the changes being made in Gentrack are yet to be completed. It is expected that the changes should be completed in early 2022 and work will begin creating the shared unmetered load. This is recorded as non-compliance in **sections 2.1, 2.2, 3.1 and 4.6.**

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 shared unmetered load is not recorded for ICPs on Wellington Electricity's network, and there have not been any changes to shared unmetered load.

Audit outcome

Compliant

8. CALCULATION OF LOSS FACTORS

8.1. Creation of loss factors (Clause 11.2)

Code reference

Clause 11.2

Code related audit information

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

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

Audit observation

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

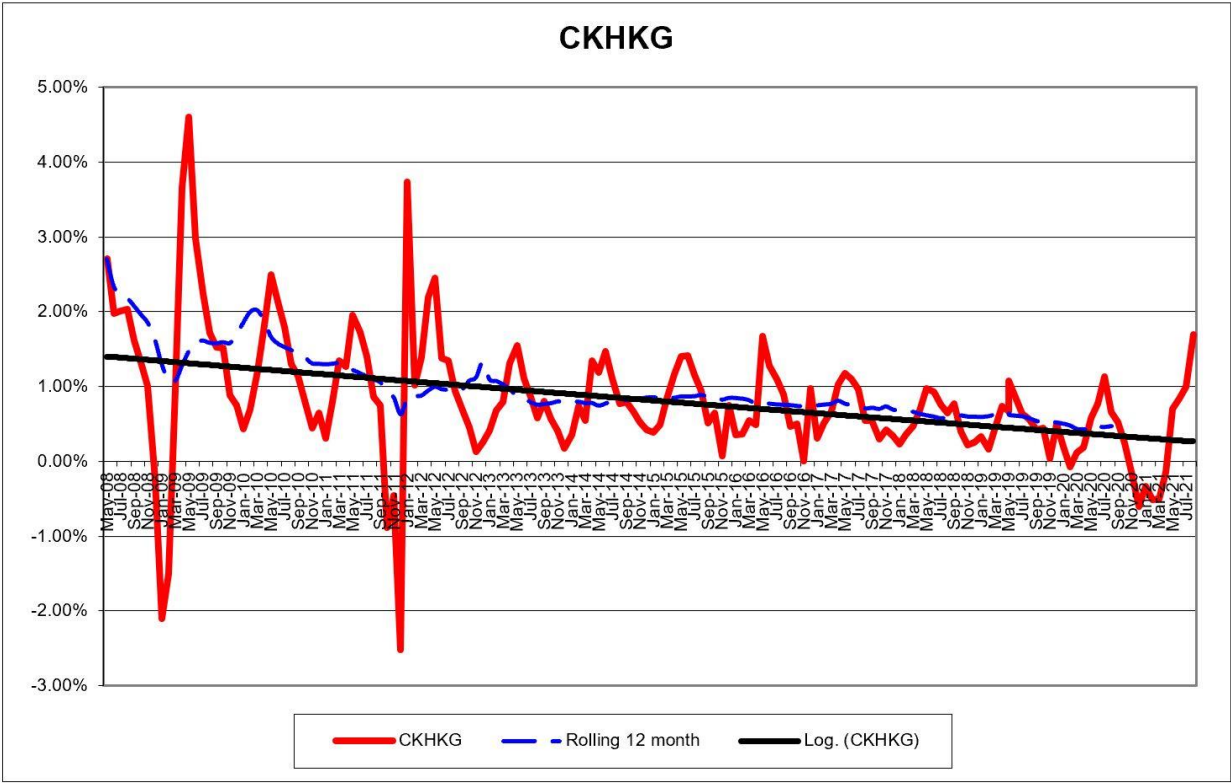
Wellington Electricity reviewed their loss factors in October 2018 in accordance with the Authority’s guideline. The next review is planned to take place in 2022.

The October 2018 review process included:

- confirming the loss factor requirements, and reviewing existing technical loss factor and loss ratio,
- confirming the loss factor policy was compliant, and the best methodology to complete the loss factor review,
- compiling the data used to support the loss factor calculation, and carrying out the review, and
- post review analysis, to identify any improvements that could be for the next loss factor review.

External consultants were engaged to ensure that Wellington Electricity’s loss factor policies and calculation methodology were consistent with the Authority’s guidelines. No further changes have been made since then.

I was provided by the Electricity Authority the reconciliation losses which indicate losses are tracking within the +/- 1% threshold indicated in the guideline:



Audit outcome

Compliant

CONCLUSION

During the audit period Wellington Electricity added a daily download of the audit compliance report to its processes to identify discrepancies and improve data accuracy. This has resulted in a strengthening of controls and an improvement in compliance which is reflected in the result of this audit.

The audit found nine non-compliances and makes one recommendation. The indicative audit frequency table indicates that the next audit is in 12 months. I have considered this in conjunction with Wellington Electricity's responses and agree with this recommendation.

PARTICIPANT RESPONSE

Wellington Electricity have spent the last five years progressively resolving an outstanding balance of data accuracies generated over a time period that includes the years prior to our purchase of the Wellington network. We intend to resolve the majority of the outstanding balance within the next calendar year. Our adoption of the Audit Compliance report within our daily health check process has been effective in helping to prevent errors.

We will be working with MEPs early in the next calendar year, to identify options for obtaining ICP liveness date information from 'an independent source', as per the auditor's recommendation in this report.

Within the next year, we also intend to implement system fixes to enable unmetered load details to be accurately provided to the registry and also enable the creation of shared unmetered load ICPs.

As part of an ongoing focus on quality improvement, we will review aspects of our connections processes highlighted by the auditor for attention.