

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**



For

WELLINGTON ELECTRICITY LINES LIMITED

Prepared by: Rebecca Elliot

Date audit commenced: 9 November 2020

Date audit report completed: 7 December 2020

Audit report due date: 28 December 2020

TABLE OF CONTENTS

Executive summary	4
Audit summary	5
Non-compliances	5
Recommendations	6
Issues 7	
1. Administrative	8
1.1. Exemptions from Obligations to Comply with Code (Section 11)	8
1.2. Structure of Organisation	9
1.3. Persons involved in this audit	10
1.4. Use of contractors (Clause 11.2A)	10
1.5. Supplier list	10
1.6. Hardware and Software	11
1.7. Breaches or Breach Allegations	11
1.8. ICP and NSP Data	11
1.9. Authorisation Received	13
1.10. Scope of Audit	13
1.11. Summary of previous audit	15
2. Operational Infrastructure	18
2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1)) ..	18
2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2))	22
3. Creation of ICPs	24
3.1. Distributors must create ICPs (Clause 11.4)	24
3.2. Participants may request distributors to create ICPs (Clause 11.5(3))	27
3.3. Provision of ICP Information to the registry manager (Clause 11.7)	28
3.4. Timeliness of Provision of ICP Information to the registry manager (Clause 7(2) of Schedule 11.1)	29
3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1)	30
3.6. Connection of ICP that is not an NSP (Clause 11.17)	33
3.7. Connection of ICP that is not an NSP (Clause 10.31)	33
3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)	34
3.9. Connection of NSP that is not point of connection to grid (Clause 10.30)	35
3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A))	35
3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1)	36
3.12. Loss category (Clause 6 Schedule 11.1)	36
3.13. Management of “new” status (Clause 13 Schedule 11.1)	37
3.14. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1)	37
3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1)	38
3.16. Electrical connection of a point of connection (Clause 10.33A)	39
4. Maintenance of registry information	40
4.1. Changes to registry information (Clause 8 Schedule 11.1)	40
4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)	43
4.3. Customer queries about ICP (Clause 11.31)	44

4.4.	ICP location address (Clause 2 Schedule 11.1)	45
4.5.	Electrically disconnecting an ICP (Clause 3 Schedule 11.1)	46
4.6.	Distributors to Provide ICP Information to the Registry manager (Clause 7(1) Schedule 11.1)	47
4.7.	Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)	54
4.8.	GPS coordinates (Clause 7(8) and (9) Schedule 11.1)	55
4.9.	Management of “ready” status (Clause 14 Schedule 11.1)	55
4.10.	Management of “distributor” status (Clause 16 Schedule 11.1)	56
4.11.	Management of “decommissioned” status (Clause 20 Schedule 11.1)	57
4.12.	Maintenance of price category codes (Clause 23 Schedule 11.1).....	58
5.	Creation and maintenance of loss factors	59
5.1.	Updating table of loss category codes (Clause 21 Schedule 11.1)	59
5.2.	Updating loss factors (Clause 22 Schedule 11.1)	59
6.	Creation and maintenance of NSPs (including decommissioning of NSPs and transfer of ICPs).....	60
6.1.	Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)	60
6.2.	Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)	60
6.3.	Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)	61
6.4.	Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)	62
6.5.	Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)	62
6.6.	Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)	63
6.7.	Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)	63
6.8.	Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3))	63
6.9.	Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2))	64
6.10.	Obligations concerning change in network owner (Clause 29 Schedule 11.1)	65
6.11.	Change of MEP for embedded network gate meter (Clause 10.22(1)(b))	65
6.12.	Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)	66
6.13.	Transfer of ICPs for embedded network (Clause 6 Schedule 11.2).....	66
7.	Maintenance of shared unmetered load	67
7.1.	Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))	67
7.2.	Changes to shared unmetered load (Clause 11.14(5)).....	67
8.	Calculation of loss factors	69
8.1.	Creation of loss factors (Clause 11.2).....	69
	Conclusion	71
	Participant response	72

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 completed at Wellington Electricity's premises in Petone on 25 November 2020.

Wellington Electricity have continued to make good improvements in their data accuracy during the audit period. The unexpected loss of a critical team member during the audit period has meant that not all actions from the previous audit have been able to be completed, but they are making every effort to get these completed. Overall processes continue to be reviewed and improved where opportunities are identified.

The audit found ten non-compliances and makes four recommendations. This is good result considering the impact of COVID-19 and the loss of a critical staff member. 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 of the sample of ten ICPs checked with a mis-mapped NSP.	Moderate	Low	2	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
Provision of ICP information to the registry	3.3	11.7	Initial electrical connection date not populated for ICP 0000162828CK0A3.	Strong	Low	1	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.	Strong	Low	1	Cleared
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	297 late initial electrical connection updates.	Moderate	Low	2	Identified
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.	Moderate	Low	2	Investigating
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.	Strong	Low	1	Identified
ICP location address	4.4	2 Schedule 11.1	24 active ICPs without a readily locatable address.	Strong	Low	1	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
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>	Moderate	Low	2	Identified
Future Risk Rating						16	

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
Provide complete and accurate information	2.1	Clauses 11.2(1) and 10.6(1)	Use the AC020 (Audit compliance reporting) to assist with the identification and management of potential data discrepancies.
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.
Distributors to Provide ICP Information to the Registry manager	4.6	Clause 8 Schedule 11.1	<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>
			Investigate if distributed generation is present on the three ICPs where the trader indicates it is present and Wellington Electricity has none.

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.

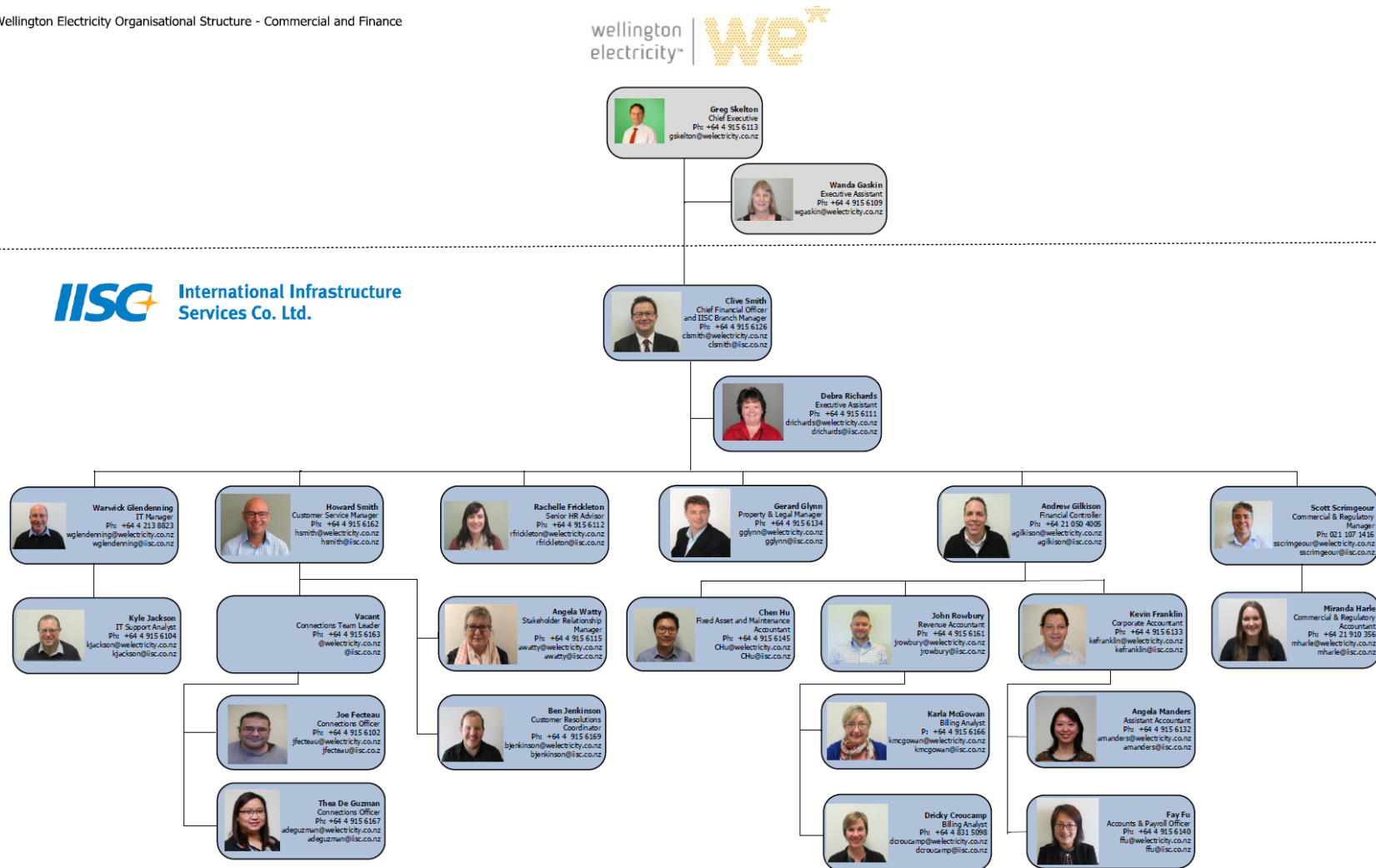
Audit commentary

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 at 14 October 2020:

Wellington Electricity Organisational Structure - Commercial and Finance



1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

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

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 2019 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	6,839
CKHK	CPK0331	Central Park			WELLTONUNETG	G	1/02/09	42,252
CKHK	GFD0331	Gracefield			WELLTONUNETG	G	1/02/09	19,115
CKHK	HAY0111	Haywards			WELLTONUNETG	G	1/02/09	6,794
CKHK	HAY0331	Haywards			WELLTONUNETG	G	1/02/09	5,333
CKHK	KWA0111	Kaiwharawhara			WELLTONUNETG	G	1/02/09	5,742
CKHK	MLG0111	Melling			WELLTONUNETG	G	1/02/09	7,959
CKHK	MLG0331	Melling			WELLTONUNETG	G	1/02/09	12,040
CKHK	PNI0331	Pauatahanui			WELLTONUNETG	G	1/02/09	6,793
CKHK	TKR0331	Takapu Road			WELLTONUNETG	G	1/02/09	33,761
CKHK	UHT0331	Upper Hutt			WELLTONUNETG	G	1/02/09	11,320
CKHK	WIL0331	Wilton			WELLTONUNETG	G	1/01/14	12,480

Networks embedded under Wellington Electricity NSPs

Wellington Electricity does not own any embedded networks. There are 95 embedded networks connected to the Wellington Electricity network.

Six new embedded networks were created after July 2019. 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
PPNZ	PSB0011	34 Ballantrae Place WELLINGTON	WIL0331	CKHK	PSB0011PPNZE	E	1/06/2020	
TENC	TDX0011	111 Dixon Street Wellington	CPK0111	CKHK	TDX0011TENCE	E	11/11/2019	
TENC	TES0011	1-3 EDWARD STREET WELLINGTON	CPK0111	CKHK	TES0011TENCE	E	1/12/2019	
TENC	TQD0011	40-44 Queens Drive HUTT CENTRAL	MLG0111	CKHK	TQD0011TENCE	E	1/05/2020	
TENC	TSQ0011	10 Ebor Street Te Aro Wellington	CPK0331	CKHK	TSQ0011TENCE	E	1/02/2020	
TENC	TVP0011	166 VICTORIA ST Wellington	CPK0111	CKHK	TVP0011TENCE	E	1/02/2020	

There were seven embedded networks which had end dates after July 2019 added to the network supply point table. None had been decommissioned or transferred back to the parent network. These have been transferred to a new embedded network owner.

ICP status

Wellington Electricity's ICPs are summarised by status below:

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

1.9. Authorisation Received

An email of authorisation was provided.

1.10. Scope of Audit

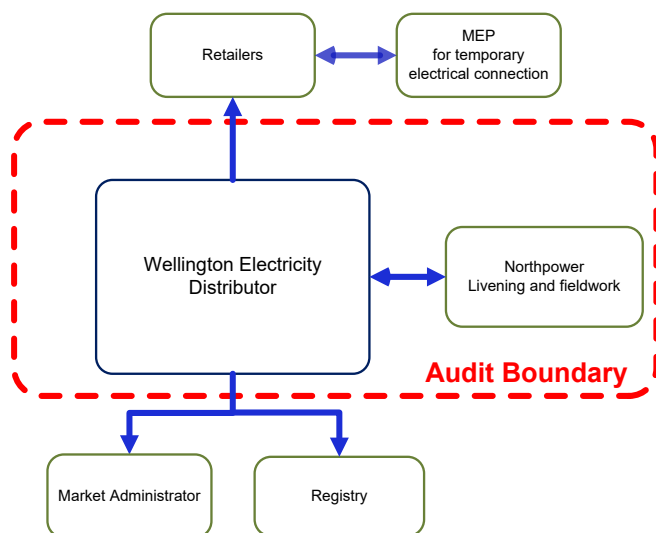
This Distributor audit was performed at the request of Wellington Electricity, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.2, which was produced by the Electricity Authority. The audit was completed at Wellington Electricity's premises in Petone on 25 November 2020.

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 August 2019 by Tara Gannon of Veritek Limited. The audit found eight non-compliances and made six 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)	At least 130 network events did not have a correct effective date recorded. 109 of the affected records were corrected during the audit. 18 records relating to unmetered load corrections and three records relating to distributed generation corrections have not been updated. Some ongoing registry discrepancies relating to unmetered load have not been resolved.	Cleared Still existing
Requirement to correct errors	2.2	11.2(2) and 10.6(2)	Correction of data does not consistently occur as soon as practicable.	Still existing
Participants may request distributors to create ICPs	3.2	11.5(3)	ICP 0000160643CK4CC was created 14 business days after a request for ICP creation was received from a trader. Wellington Electricity did not advise the trader that the ICP would not be created within three business days.	Cleared
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	98 late initial electrical connection updates.	Still existing
Changes to registry information	4.1	8 Schedule 11.1	295 late network updates. 102 late pricing updates. 28 late status updates.	Still existing
Notice of NSP for each ICP	4.2	7(1),(4) and (5) Schedule 11.1	At least 36 ICPs had an incorrect NSP recorded and were corrected during the audit.	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>Three ICPs were found to have some incorrect address information recorded and were corrected during the audit.</p> <p>LE ICP 0000161190CKBEC temporarily had dedicated NSP set to No and was corrected during the audit.</p> <p>At least 57 ICPs did not have correct initial electrical connection date recorded. The 57 affected records were corrected during the audit.</p> <p>Generation capacity and fuel type details are recorded on the registry from the date the application for generation is approved. The installation type is not updated until EG metering is installed. At the time the registry list was run, at least 106 ICPs had incorrect generation details recorded on the registry. Some corrections have been processed, and at least 41 ICPs have some incorrect details on 05/09/19.</p> <p>25 ICPs had incorrect distributor unmetered load details. All 25 ICPs were corrected during the audit.</p>	Still existing
GPS coordinates	4.8	7(8) and (9) Schedule 11.1	ICP 0000157320CK7B5's GPS coordinates were in UTM format instead of NZTM2000 format. The GPS coordinates have now been removed from the registry.	Cleared

Table of Recommendations:

Subject	Section	Recommendation	Status
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"> 3. Checking the EIEP1/3 reports provided by traders to determine whether the EG registers are recording consumption. 4. Checking the high risk database (/www.energysafety.govt.nz/energysafety/app/highrisk-db/home) for the address, to determine whether generation has been installed. <ul style="list-style-type: none"> • Follow up any ICPs which appear to have missed applications with the trader. 	Repeated
Distributors to Provide ICP Information to the Registry manager	4.6	<p>Follow up ICPs with approved applications, which do not have EG or injection flow metering installed within three months with the trader.</p> <p>These ICPs can be checked on the high risk database (www.energysafety.govt.nz/energysafety/app/highrisk-db/home) to help to determine whether generation has been installed.</p>	Repeated
Distributors to Provide ICP Information to the Registry manager	4.6	Update the registry from the date it is known that generation is installed or the generation metering installation date, whichever is earlier.	Adopted

Subject	Section	Recommendation	Status
		Ensure that generation capacity reflects the name plate capacity of the generation plant, which may differ from the information provided on the application.	Adopted
Distributors to Provide ICP Information to the Registry manager	4.6	Recheck ICP 1000756506UN59C to confirm the correct unmetered load details, and update GTV and the registry as required. Recheck ICPs 0000157142CK2C7, 0000157143CKE82, 0000157144CK348 and 0000157145CKF0D to confirm the correct on hours, and update GTV and the registry as required.	Cleared Recorded as non-compliance in this audit
Notice of balancing areas	6.3	Investigate to confirm which NSPs should be grouped into balancing areas, and then create and assign any new balancing areas as required.	In progress
Notification of shared unmetered load ICP list	7.1	Liaise with Porirua, Hutt City and Wellington Councils to identify shared unmetered load and create relevant ICPs. Notify traders of created shared load in accordance with clause 11.14 of part 11.	Recorded as non-compliance in this audit.

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 at registry list for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 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. I recommend that the audit compliance reports are used as well to assist with the identification of potential errors.

Recommendation	Description	Audited party comment	Remedial action
Requirement to provide complete and accurate information	Use the AC020 (Audit compliance reporting) to assist with the identification and management of potential data discrepancies	The AC020 report will be incorporated into our quality assurance processes.]	Identified

Wellington Electricity have implemented the additional validation recommended in the last audit to cross check initial electrical connection dates and “active” dates against the meter certification date, and any differences are queried with the trader. Wellington Electricity is aware that meter certification is required within five business days of initial electrical connection, so the meter certification date may not always be consistent with the initial electrical connection date.

Details of 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.

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 metering is installed. Distributed generation processes are discussed further in **section 4.6**.

Wellington Electricity has continued to improve its level of compliance with the code. This is evident with the high level of data accuracy 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. This is largely due to the unexpected loss of a critical staff member during the audit period. Wellington Electricity are working to get these issues resolved. The areas to be addressed are detailed below:

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. The last audit recorded that shared unmetered load was expected to be created for these lights by September 2019. This has not been able to be progressed as the process failed in the test system. They are working to get this resolved and the shared unmetered load created and notified.

Initial electrical connection dates

Examination of the list file found that there are 27,149 active ICPs with the initial electrical connection dates populated prior to 29/08/13 and these are not required in the registry. These are expected to be removed as part of the data cleanse project underway.

Event dates

The last audit identified an issue with the application of event dates. This is not evident in this audit but the unmetered ICPs with the incorrect event date applied identified in the last audit have not been corrected. A fix is expected for this but has not been deployed yet. The ICPs affected are listed below:

- 0000160900CK5A6
- 0000160475CK8BC
- 0000158540CK723
- 0000158542CK7A6
- 0000158529CK682
- 0000158536CK3F1
- 0000157590CK301
- 0000156857CKD8C
- 1001152583CK8BA
- 1001146928CKC1C
- 1001145773UNA56
- 1000756168UN5F6
- 0000121539TR493
- 0000190117TR9F5
- 0000159586CK0E3

- 1001156919CKF40
- 0000157855CKCA9, and
- 0000158224CK6DB.

I checked the three ICPs where generation was recorded as not being applied from the correct date from the last audit and found that two were correctly added as these align with the date the metering was installed and certified and not the date recorded on the high risk database which has been found to be unreliable. The remaining ICP 1001153905CK1D3 has been corrected.

NSP Dedication

15 ICPs were assigned the dedicated flag incorrectly. This is detailed in **section 4.6**.

NSP assignment

Robust processes are in place to ensure that NSPs are correctly assigned.

The data cleanse project continues to identify historic mis-mapped ICPs. The last audit recorded 244 roads with potentially mis-mapped NSPs. This information is reported in the AC020 and is ICP based, it returned a total of 77 potentially mis-mapped ICPs. This is a good reduction from the volumes reported in the last audit. Of the typical sample of ten ICPs checked from the AC020 with potentially mismapped NSPs only one was confirmed as mis-mapped. 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: 06-Sep-19 To: 30-Sep-20	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. 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	The controls are rated as moderate as registry accuracy is managed on a daily basis and planned improvements to these processes are expected to move the controls to strong. 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
<p>Shared unmetered load:</p> <ul style="list-style-type: none"> Billing system functionality for Shared Unmetered Load (SUML) will be deployed. A recommendations paper to management will be submitted for their consideration. <p>Initial electrical connection dates:</p> <ul style="list-style-type: none"> The ICPs mentioned above will have their incorrect IEDs removed via bulk update. <p>Event dates;</p> <ul style="list-style-type: none"> The ICPs mentioned above will be corrected. <p>NSP Dedication:</p> <ul style="list-style-type: none"> The ICPs mentioned above will be corrected. <p>NSP assignment:</p> <ul style="list-style-type: none"> The one incorrect ICP has been corrected. <p>The remaining 77 ICPs will be reviewed.</p>	<p>28 May 2021</p> <p>28 May 2021</p> <p>26 Feb 21</p> <p>26 Feb 21</p> <p>26 Feb 21</p> <p>Complete</p> <p>26 Feb 21</p>	<p>Identified</p>
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>In addition to the actions documented below, adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction.</p> <p>Shared unmetered load:</p> <ul style="list-style-type: none"> Billing system functionality for Shared Unmetered Load (SUML) will be deployed. A recommendations paper to management will be submitted for their consideration. <p>Initial electrical connection dates:</p> <ul style="list-style-type: none"> Our quality assurance processes will be changed to adopt the auditor's recommendations. <p>Event dates;</p> <ul style="list-style-type: none"> Our work instructions have been amended. <p>NSP Dedication:</p> <ul style="list-style-type: none"> Our work instructions and documentation will be amended to explain the concept and provide procedures. <p>NSP assignment:</p> <p>Our quality assurance processes will be amended to incorporate a review of any potential non-compliances.</p>	<p>29 Jan 2021</p> <p>28 May 2021</p> <p>28 May 2021</p> <p>29 Jan 2021</p> <p>Complete</p> <p>30 Apr 2021</p> <p>29 Jan 21</p>	

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 for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 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. This is largely due to the unexpected loss of a critical staff member during the audit period.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.2 With Clause 11.2(2) From: 01-Nov-18 To: 30-Sep-20	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	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. 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
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction.		29 Jan 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction. Shared unmetered load: <ul style="list-style-type: none"> Billing system functionality for Shared Unmetered Load (SUML) will be deployed. A recommendations paper to management will be submitted for their consideration. 		29 Jan 2021 28 May 2021 28 May 2021	

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

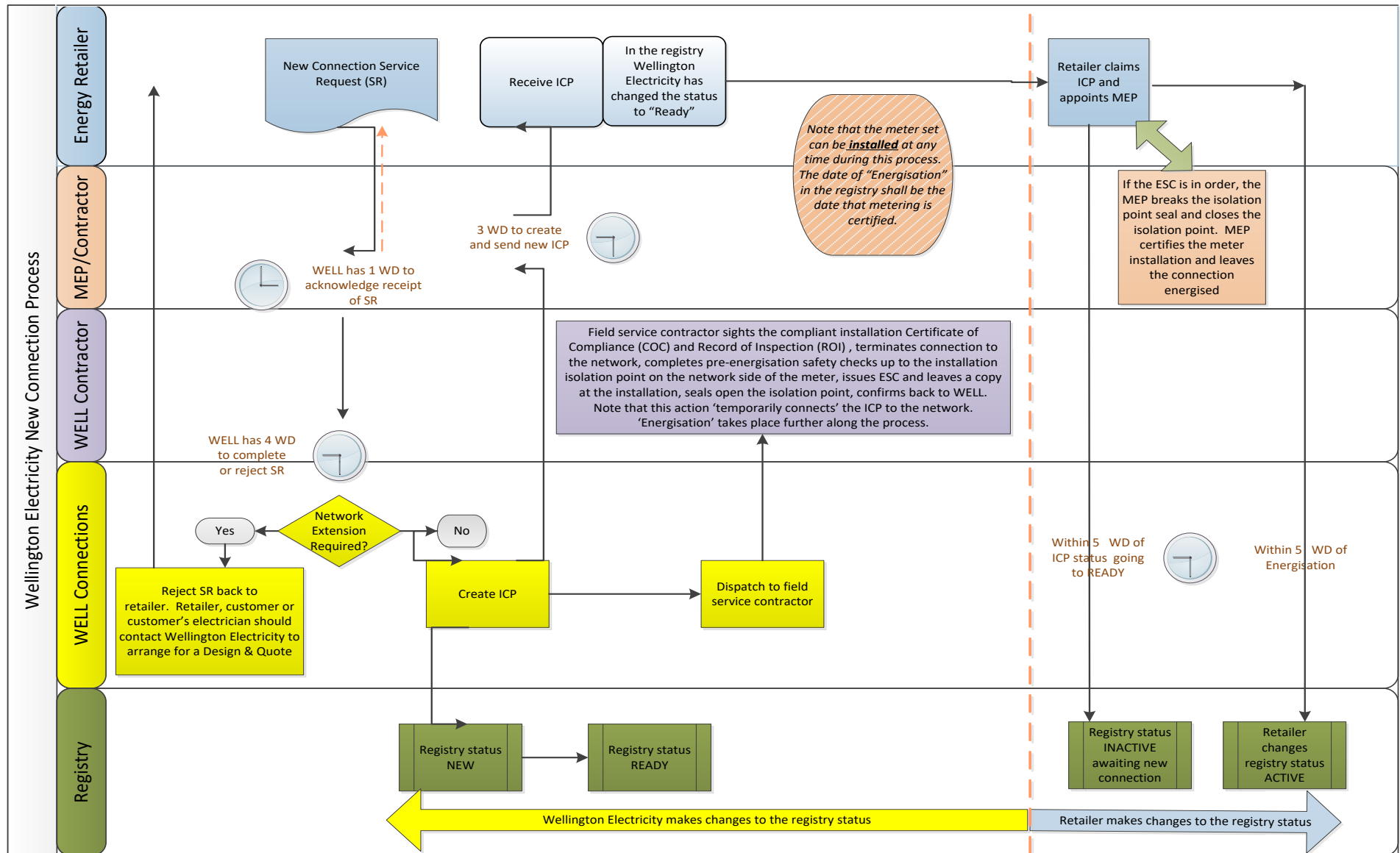
The new connection process was examined in detail and is described in **section 3.2**. 20 new connection applications of the 2,831 created were sampled using diverse characteristic methodology from the point of application through to when the ICP was created. This included three unmetered load ICPs and three ICPs with distributed generation associated.

I also checked the six 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 six new embedded networks. One additional LE ICP was created for the PPH0011 embedded network. All were mapped to the correct NSP.

The creation of shared unmetered load ICPs was examined. 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. The last audit recorded that shared unmetered load was expected to be created for these lights by September 2019. This has not been able to be progressed as the process failed in the test system. They are working to get this resolved and the shared unmetered load created and notified. 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: 30-Sep-20	Shared unmetered load ICPs not created to account for shared unmetered streetlights connected on the network. Potential impact: Low Actual impact: Low Audit history: None 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
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction.		29 Jan 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Shared unmetered load: <ul style="list-style-type: none"> Billing system functionality for Shared Unmetered Load (SUML) will be deployed. A recommendations paper to management will be submitted for their consideration. 		28 May 2021 28 May 2021	

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. In an effort to reduce the number of incomplete and incorrect applications, Wellington Electricity has provided revised portal documentation to traders.
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 two ICPs with unmetered load and two with distributed generation recorded. All were created within three business days of the trader providing all the information required for the new connection application.

Audit outcome

Compliant

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 with the exception of ICP 0000162828CK0A3. This is an unmetered load connection and was made active but has no initial electrical connection date recorded. The population of the meter certification date is used to trigger the update but as this is unmetered connection, this has been missed. I recommend in **section 2.1** that the AC020 report is used and this will identify such missing data. This is recorded as non-compliance below and in **section 4.6**.

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

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 11.7 From: 07-May-20 To: 30-Sep-20	Initial electrical connection date not populated for ICP 0000162828CK0A3. 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 recorded as strong because they mitigate risk to an acceptable level. There are very few new unmetered load connections; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
The Initial electrical connection date for ICP 0000162828CK0A3 has now been populated.		9 Dec 2020	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction.		29 Jan 2021	

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 for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 were examined to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

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

The audit compliance report identified 12 of the 2,361 ICPs (99.5% compliance) that were made “ready” after electrical connection had occurred. These were examined and found all 12 related to the Trustpower Chorus project where individual ICPs are being created to replace a DUMML bucket ICP. These have all been backdated to an agreed start causing them to be technically non-compliant but assists with ensuring reconciliation occurs correctly.

The timeliness of provision of initial electrical connection dates is discussed separately in **section 3.5**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.4 With: Clause 7(2) of Schedule 11.1 From: 11-Jul-19 To: 30-Sep-20	12 ICPs updated to “ready” after electrical connection. Potential impact: None Actual impact: None Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Wellington Electricity has robust controls for new connections, and these were part of the unbundling of an existing DUMML ICP, therefore controls are rated as strong. The impact on settlement is to increase accuracy therefore the actual impact is none but low is the only option available.		
Actions taken to resolve the issue		Completion date	Remedial action status
No action required, as per the auditor comments.		N/A	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
No action required, as per the auditor comments.		N/A	

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 for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 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 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 recommend 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.	We will be reviewing our connection processes in the New Year to identify process improvements and how we can utilise alternate information sources. This will include discussion with Traders and Metering providers on the feasibility of them providing us with meter installation paperwork.	Investigating

In the last audit it was recorded that further validations to cross check initial electrical connection dates and "active" dates against the meter certification date and query any differences was planned. The unexpected loss of a key staff member has delayed this. I recommend in **section 2.1**, that the AC020 report be used and this will provide Wellington Electricity with good visibility of any discrepancies.

There were 2,647 initial electrical connection date updates in the event detail report. The audit compliance report identified 297 (11%) 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 a 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: 29-Jul-19 To: 30-Sep-20	297 late initial electrical connection 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 and will move to strong with the adoption of the recommendation in section 2.1, to use the AC020 report. The impact is assessed to be low as the majority of dates are populated in the required timeframe.		
Actions taken to resolve the issue		Completion date	Remedial action status
The ICPs mentioned above will have their incorrect IEDs removed via bulk update.		26 Feb 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction. As per our response to Clause 7(2A) Schedule 11.1 we will review our connection process to determine the feasibility of using alternate information sources for IEDs.		29 Jan 2021 30 Jun 2021	

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 for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 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 identified 12 ICPs that were electrically connected prior to being made “ready” on the registry and therefore a trader was not recorded in the registry as accepting responsibility for the ICP. These are discussed in **section 3.4** and recorded as non-compliance.

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 on the network due to it failing testing. They are working to get this resolved and the shared unmetered load created and notified. This is recorded as non-compliance in **sections 2.2** and **7.1**.

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 for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 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.

The audit compliance report identified 12 ICPs that were electrically connected prior to being made “ready” on the registry and therefore a trader was not recorded in the registry as accepting responsibility for the ICP. These were all backdated unmetered connections created as part of the DUMML clean-up being undertaken by Trustpower therefore compliance is confirmed.

Audit outcome

Compliant

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

Code reference

Clause 10.31A

Code related audit information

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

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

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

advising all traders would impose a material cost on the distributor, and

in the distributor’s reasonable opinion, the advice would not result in any material benefit to any of the traders.

Audit observation

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

The registry list for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 were examined.

Audit commentary

Any ICPs that are temporarily electrically connected follow the same process as other new connections.

I identified one new connection where the meter certification date was prior to the initial electrical connection date, indicating that they may have been temporarily electrically connected for meter certification. This was examined and found that ICP 0000142213TR4ED had been decommissioned in error and ICP 0000163316CK66E was created to replace it. Best practice in these instances would be to reverse the decommissioning event and return the ICP to active. Wellington Electricity were not aware this was possible and will do this in any future instances.

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 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:

xxxxxxxxxxxccc where:

- *xxxxxxxxxx is a numerical sequence provided by the distributor*
- *xx is a code that ensures the ICP is unique (assigned by the Authority to the issuing distributor)*
- *ccc is a checksum generated according to the algorithm provided by the 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 as at 29/07/19 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 as at 29/07/19 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 combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 were examined to identify any ICPs that had been at “new” and “ready” for more than 24 months.

Audit commentary

The monitoring of ICPs at “new” or “ready” status lapsed in May 2020 due to the unexpected loss of a critical team member. I recommend in **section 2.1**, that the AC020 report is reviewed regularly and these ICPs are reported there. These checks and those of ICPs at the “inactive - new connection in progress” status for more than 24 months, are being reinstated.

Whilst not a code requirement I checked all ICPs at the “inactive- new connection in progress” status for more than 24 months. Examination of the list file found eight ICPs. These were checked and found five of these have never been connected and they are being followed up with the trader to remove their status event so Wellington Electricity can decommission these. The remaining two ICPs (ICPs 0000158504CK48C and 0000159526CK8FC) are believed to be connected but it doesn’t appear that they have been electrically connected. Wellington Electricity have been in touch with the retailer but have had no reply. These were previously being checked as part of the monitoring of ICPs at “new” or “ready” and this is planned to be re-established.

The audit compliance report identified eight ICPs that have been at the “ready” status for more than 24 months. These were checked and found that six ICPs are no longer required and have been decommissioned - set up in error. The remaining two ICPs are being investigated to determine if they are still required.

The registry list shows seven ICPs have been at “new connection in progress” status for more than 24 months, including two ICPs which have been at the status since 2017. Five of these have never been connected and are being followed up with the trader to remove their status event so Wellington Electricity can decommission them. The remaining two ICPs (ICPs 0000158504CK48C and 0000159526CK8FC) are believed to be connected but it doesn’t appear that they have been electrically connected. Wellington Electricity have been in touch with the retailer but have had no reply. These are being followed up again.

Audit outcome

Compliant

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

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

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

- *The loss category code must be unique; and*
- *The distributor must provide the following to the reconciliation manager:*
 - o *the unique loss category code assigned to the ICP*
 - o *the ICP identifier of the ICP*
 - o *the NSP identifier of the NSP to which the ICP is connected*
 - o *the plant name of the embedded generating station.*

Audit observation

The EMI wholesale data set as at 01/08/19 and registry list as at 29/07/19 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 10 MW or more. This ICP has an individual loss category code (MILL01) and was connected on 01/04/2014.

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

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 for 30/09/20 and the registry compliance audit report covering the period from 29/07/19 to 30/09/20 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
Price codes	2019	75	98.1%	N/A
	2020	749	98.09%	1.43
Status	2019	28	95.6%	-
	2020	94	82.95%	2.89

Update	Date	Late	% Compliant	Average days
Network (excl. new connection & Distributed Generation)	2020	81	N/A	N/A
Distributed Generation	2020	174	55.41%	27.63
NSP changes	2020	0	100%	N/A

Address events

The combined audit compliance reporting found five late status updates. These were examined and found all were corrections to addresses.

Pricing events

The number of backdated pricing events has increased since the last audit, but this is not a reflection in a decline in performance as overall compliance is still 98% and average of just over one day to update price changes. The sample of 20 ICPs checked included a typical sample of ten ICPs and an extreme example of ten 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. The extreme sample were backdated between 93 to 686 days.

Network events

The audit compliance reporting indicated 685 late network events. These were analysed and found that all but 81 events related to either the updating of distributed generation updates which are measured separately below and the population of the initial electrical connection date which is reported in **section 3.5**. 31 of these related to the correction of the installation type to "B" which were corrections from the last audit. A typical sample of a further eight late networks events were examined and found all related to corrections. The event date in all cases was correctly applied.

Distributed Generation events

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

The new audit compliance reports record's these events separately to other network events. The combined report found 174 late updates. Getting the information back from the field once distributed generation has been installed continues to be challenging.

A typical sample of ten ICPs and a further extreme sample of ten ICPs were examined. Examination of the typical sample found that these related to processing delays due to workload and that distributed generation updates are made weekly. The extreme sample found that these all related to corrections to remove incorrectly populated initial electrical connection dates or corrections to the distributed generation details changing the installation details from "L" to "B".

Status events

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

The combined audit compliance reporting found 94 late status updates. 64 of these relate to the one site. This was delayed in being updated to decommissioned due to the checks required to confirm the details. A typical sample of six ICPs was examined for the remaining 30 ICPs and found that these were updated late due to late notification from the field.

NSP changes

The audit compliance report recorded 13 late NSP changes. These were examined and found that these were due to the repopulation of the distributed generation details that had been incorrectly removed from the registry. 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: 06-Sept-19 To: 30-Sept-20	5 late addresses updates. 749 late pricing updates. 94 late status updates. 81 late network updates. 174 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
No action required, as per the auditor comments.		N/A	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
The ICPs mentioned in a previous section will have their incorrect IEDs removed via bulk update. This will prevent further occurrences if we improve the accuracy of information for any of those ICPs.		26 Feb 2021	

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 seven active ICPs where 10% or fewer ICPs on a street have a different NSP and there are fewer than 77 ICPs with a different NSP. A typical sample of 20 of these were examined to determine if the correct NSP has been assigned.

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.

The project to validate and cleanse its NSP data is still in progress.

The last audit recorded 244 roads with potentially mis-mapped NSPs. This information is reported in the AC020 and is ICP based, it returned a total of 77 potentially mis-mapped ICPs. This is a good reduction from the volumes reported in the last audit. These have been passed to Wellington Electricity to investigate. The typical sample of ten ICPs checked found eight were correctly recorded. The address of ICP 1001109677UN24D is being confirmed with the trader as the address recorded in Gentrack is different to that recorded on the registry. There is a check for duplicate addresses but not for address differences between the registry and Gentrack. Wellington Electricity intend to add this to the discrepancy reporting. One ICP was found to be recorded against the incorrect NSP. This has been corrected.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.2 With: Clauses 7(1), (4) and (5) Schedule 11.1 From: 01-Sept-19 To: 30-Sept-20	One ICP of ten ICPs checked 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 audit risk is assessed to be low as only 77 potentially mis-mapped ICPs were identified and only one was found to be incorrect of the sample checked. .		
Actions taken to resolve the issue		Completion date	Remedial action status
The one incorrect ICP has been corrected. The remaining 77 ICPs will be reviewed.		Complete 26 Feb 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction. A validation check to compare Gentrack to Registry address data will be added.		29 Jan 2021 29 Jan 2021	

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 at 30/09/20 and the combined 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 54 active ICPs where the address not readily locatable. Wellington Electricity checked these and found:

- 30 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 24 ICPs and will update these when they are returned. This is recorded as non-compliance below.

I recommend in **section 2.1**, that the AC020 report is used and this will identify any active ICPs with addresses that do not have readily locatable addresses on an ongoing basis.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: Clauses 2 Schedule 11.1 From: 01-Sept-19 To: 30-Sept-20	24 active ICPs without a readily locatable address. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	Controls are rated as strong as Wellington Electricity processes demonstrated robust controls. The audit risk is assessed to be low as only 54 active ICPs have addresses not readily locatable.		
Actions taken to resolve the issue		Completion date	Remedial action status
A followup communication round with retailers for the remaining 24 ICPs will be conducted.		26 Feb 2021	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Adoption of the audit compliance report in our quality assurance procedures will identify any potentially non compliant instances for correction.		29 Jan 2021	

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 for 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 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

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

The NSP dedication flag was checked.

The last audit found an LE ICP dedication discrepancy. All LE ICPs were checked and I confirmed that all had a dedicated NSP flag.

There is only one balancing area for the Wellington Electricity network. All but 15 active ICPs have the dedicated flag set to N. The 15 ICPs with a dedicated NSP flag applied were checked and found to have the incorrect dedication flag applied.

NSP	Dedicated NSP = N	Dedicated NSP = Y
CPK0111	6829	10
CPK0331	42249	3
HAY0331	5332	1
WIL0331	12479	1

This is being corrected. 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.

I recommend in **section 2.1**, that the AC020 reporting is used to identify potential registry discrepancies and this includes a report that checks where the trader has indicated a DG profile, but Wellington Electricity has none recorded.

The last audit recommended some minor improvements to the management of distributed generation. Due to the unexpected loss of a critical staff member during the audit period these haven't been implemented as yet. I have repeated the recommendations to maintain visibility:

Recommendation	Description	Audited party comment	Remedial action
Clause 8 Schedule 11.1 Distributed generation details on the registry	<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 (https://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>	We will implement the auditor's recommendations.	Identified

The registry installation type, generation capacity, and fuel type are expected to be updated effective from the date that generation begins. Approval to generate, and installation of EG metering may occur on a different date to commencement of generation. Where a trader decides to gift generated electricity, EG metering may not be installed at all.

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
2020	1,487

Examination of the list file found 20 ICPs with a fuel type and generation capacity, but an installation type of L. These are as a result of an earlier process where Wellington Electricity populated the generation details at the time of application and were changing the installation type from “L” to “B” upon confirmation of installation. This practice stopped prior to the last audit and these are the remaining ICPs to be corrected. This is a good reduction from the 160 ICPs found in the last audit.

All other ICPs with generation capacity had a fuel type and installation type of B or G recorded.

The audit compliance report identified six 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:

- No application has been received for three ICPs. The trader was requested to provide details, but no responses have been received. Installation of the generation details are recorded on the high-risk database indicating that generation is present for ICP 0000043289TRC57. I recommend that a field visit is conducted for all three ICPs to confirm if generation is present.

Recommendation	Description	Audited party comment	Remedial action
Distributor to provide ICP information to the registry	Investigate if distributed generation is present on the three ICPs where the trader indicates it is present and Wellington Electricity has none.	We will implement the auditor’s recommendation.	Identified

- Distributed generation has been confirmed as not present or not generating back to the grid for the remaining three ICPs (0000190525TR289, 0000052403TR4CB and therefore the trader’s profile is incorrect.

The accuracy of generation details including generation capacity and fuel types were checked by examining a typical sample of ten ICPs with distributed generation added during the audit period and confirmed all were recorded correctly.

I checked the findings from the last audit and found:

- the last audit recorded non-compliance for ICPs 0000072559TRE9B, 1001112665UNF64 and 1001153905CK1D3 and I confirmed that the registry event date reflected the correct installation date based on the information provided by Wellington Electricity,
- distributed generation has now been added to ICP 0000085149TR9CB, and
- ICP 0000100101TR513 was confirmed to be a wind fuel type and the trader has corrected their profile to RPS EG1.

Initial electrical connection dates

The audit compliance reporting identified 14 ICPs with date inconsistencies between the initial electrical connection date, the active date and the meter certification date. These were examined and found:

- seven ICPs had a date consistent with the traders first active date and the metering was certified later,
- five had a date consistent with the meter certification date and the traders first active date was later and is incorrect, and
- the remaining two ICPs were keyed in incorrectly and have since been corrected; this is recorded as non-compliance.

The audit compliance report identified four ICPS with no initial electrical connection dates populated since the requirement came into effect. These were all electrically connected within the audit period. All but one of these has since been populated as part of BAU. ICP 0000162828CK0A3 is an unmetered new connection. As the meter certification is currently used to trigger this update this has been missed. I recommend in **section 4.6**, that the process to receive the initial electrical connection date is reviewed. Additionally, I recommend in **section 2.1**, that the AC020 report is used and this reports on any ICPs with missing initial electrical connection dates.

Examination of the list file found 27 ICPs at “inactive - new connection in progress” with an initial electrical connection date populated. An extreme example of ten of these were checked and found all were correctly populated and the trader has since made these active.

Examination of the list file found that there are 27,149 active ICPs the initial electrical connection dates populated prior to 29/08/13 and these are not required in the registry. These are expected to be removed as part of the data cleanse project underway.

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

831 active ICPs have a value in the Unmetered load details – Distributor field, an increase from the 812 active ICPs recorded in 2019. 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. Wellington Electricity during the last audit investigated changing to the Authority’s recommended format but decided not to proceed because a change to GTV’s base code would be required.

Trader unmetered load is recorded without distributor unmetered load

Review of the registry list found that 50 active ICPs where the trader unmetered load recorded, but Wellington Electricity 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. This includes ICPs 0000159166CK658 and 0000159069CK082 reported in the last audit. These are part of an ongoing investigation with the trader as these were applied for as metered supplies, but they were installed as an unmetered supply. Wellington Electricity is waiting for the trader to confirm the unmetered load details.

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 confirming that the nine ICPs identified in the last audit have been resolved.

Distributor unmetered load details differ from the trader unmetered load details

831 active ICPs have a value recorded in the distributor unmetered load details field. I compared the figures for the 331 ICPs where the format of the distributor information enabled recalculation, and a trader unmetered load value was populated. For 301 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 25 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 21 of these ICPs, and
- the last audit recommended that these remaining four ICPs be investigated; they were checked during the trader audit and the estimated usage is more accurate than that recorded by Wellington Electricity as detailed below:

ICP	Unmetered load details - Distributor	Unmetered Load Details - Retailer	Comment
0000157142CK2C7	0.07kW:24:G001_7 2W_NSL	0072;00.1;max24hr per year Flood Water Penstock	The trader has recorded 24 hours per annum, and this was confirmed as compliant in the trader's audit, and not 24 hours per day.
0000157143CKE82			
0000157144CK348			
0000157145CKF0D			

This is recorded as non-compliance below.

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. The last audit recorded that shared unmetered load was expected to be created for these lights by September 2019. This has not been able to be progressed as the process failed in the test system. They are working to get this resolved and the shared unmetered load created and notified. This is recorded as non-compliance below in **sections 2.2** and **3.1**.

Audit outcome

Non-compliant

Actions taken to resolve the issue	Completion date	Remedial action status
<p>15 ICPs with the NSP dedication set to Yes.</p> <ul style="list-style-type: none"> These ICPs will be corrected. 	26 Feb 2021	Identified
<p>20 ICPs with distributed generation present and the incorrect installation type of "L".</p> <ul style="list-style-type: none"> Any ICPs that we have verified as having DG have already been amended. The remainder require confirmation from the Traders that DG is present, as no applications for these ICPs were received. 2 of the ICPs were confirmed as having no DG present. 	26 Feb 2021	
<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> <ul style="list-style-type: none"> A bulk update to correct the previously mentioned ICPs will be performed. 	26 Feb 2021	
<p>Four ICPs with the incorrect unmetered load details recorded.</p> <ul style="list-style-type: none"> We will investigate a work-around to resolving these 4 ICPs which will address both the audit non-compliance and still generate accurate billing. 	28 May 2021	
<p>Shared unmetered load present but not recorded on the registry.</p> <ul style="list-style-type: none"> Billing system functionality for Shared Unmetered Load (SUML) will be deployed. 	28 May 2021	
<ul style="list-style-type: none"> A recommendations paper to management will be submitted for their consideration on how we approach this. 	28 May 2021	
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Adoption of the audit non-compliance reporting into our quality assurance processes will identify these situations occurring in the future so we can address and resolve.</p>	29 Jan 2021	

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

The price category and chargeable capacity (if any) are usually known at the time of the ICP being created and are recorded prior to electrical connection. If these details are not known prior to initial electrical connection, they are updated as soon as possible after notification is received from the contractor.

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 as at 29/07/19 was reviewed to identify all ICPs with GPS coordinates. GPS coordinates were mapped using to determine their accuracy relative to the physical address listed.

Audit commentary

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

Review of the registry list found no active ICPs have GPS co-ordinates recorded.

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 as at 30/09/20 and the combined registry compliance audit reports covering the period from 29/07/19 to 30/09/20 were reviewed 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 as at 30/09/20, the NSP table as at 01/11/20, and event detail reports for 29/07/19 to 30/09/20 were reviewed to identify ICPs at "distributor" status and check compliance.

Audit commentary

The registry list showed 108 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 95 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 as at 30/09/20, the event detail report and combined audit compliance reports for 29/07/19 to 30/09/20 were reviewed to identify ICPs at “decommissioned” or “ready for decommissioning” status and check compliance.

A typical sample of ten “decommissioned” ICPs and five 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 only 16 ICPs pending decommission. 12 of these relates to unmetered loads where Genesis Energy is the retailer. A sample of five 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 liaising with Genesis to confirm details before these are decommissioned.

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

Two new price category codes were created during the audit period. Both were notified correctly.

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 audit, until 30/04/08, the network (then owned by UNET) had one balancing area per NSP. On 01/05/08 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 intends 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

Wellington Electricity has not initiated the transfer of any ICPs during the audit period.

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

Wellington Electricity has not initiated the transfer of any ICPs during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 6 Schedule 11.2

Code related audit information

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Wellington Electricity has not initiated the transfer of any ICPs during the audit period.

Audit outcome

Compliant

7. MAINTENANCE OF SHARED UNMETERED LOAD

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

Code reference

Clause 11.14(2) and (4)

Code related audit information

The distributor must 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 as at 29/07/19 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. 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. The last audit recorded that shared unmetered load was expected to be created for these lights by September 2019. This has not been able to be progressed as the process failed in the test system. They are working to get this resolved and the shared unmetered load created and notified. 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 as at 29/07/19 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.

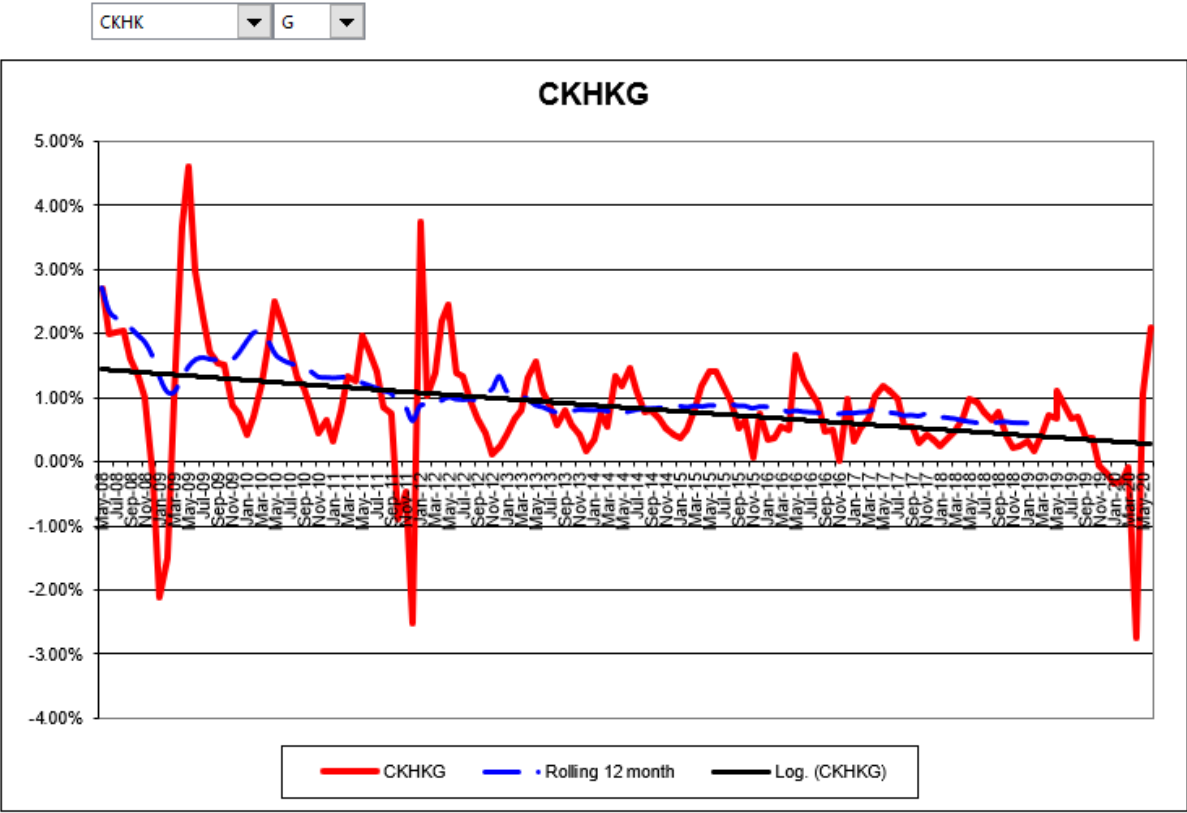
The review process included:

- 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:

UFE% by Network calculator



Audit outcome

Compliant

CONCLUSION

Wellington Electricity have continued to make good improvements in their data accuracy during the audit period. The unexpected loss of a critical team member during the audit period has meant that not all actions from the previous audit have been able to be completed, but they are making every effort to get these completed. Overall processes continue to be reviewed and improved where opportunities are identified.

The audit found ten non-compliances and makes four recommendations. This is good result considering the impact of COVID-19 and the loss of a critical staff member. 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 continues to focus on resolving its outstanding balance of historical data errors, though the Connections Team have significantly reduced that balance over the last year.

Wellington Electricity will adopt use of the Audit non-compliance reporting into its quality assurance processes, enabling faster identification and resolution of potential non-compliances.

We will also be reviewing our connections processes to focus on the areas highlighted by the auditor for attention.