ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT

For

Westpower Limited

Prepared by: Rebecca Elliot

Date audit commenced: 9 July 2020

Date audit report completed: 5 October 2020

Audit report due date: 07-Oct-20

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EXECUTIVE SUMMARY

This Distributor audit was performed at the request of Westpower Limited (Westpower), 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.

Westpower have good controls in place for most processes. Two areas of opportunity were identified:

- I found 33 ICPs that had a meter certification earlier than the initial electrical connection date and the trader's first active date indicating that these dates are incorrect. I recommend that Westpower liaise with the traders and MEPs to resolve this.
- The updates for distributed generation are slow as the installers are not following Westpower's direction that they be present when generation is connected. I

Overall the level of compliance is high and controls generally found to be strong.

The audit found nine non-compliances and makes three recommendations. The indicative audit frequency table indicates that the next audit be in 12 months. I have considered this in conjunction with Westpower's responses and agree with that recommendation.

I thank Raelene and the Westpower team for their co-operation during the audit.

The matters raised are shown in the table below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Complete and accurate information	2.1	11.2(1)	Incorrect initial electrical connection dates populated for 36 ICPs.	Strong	Low	1	Identified
Ready updates	3.4	Clause 7(2) of Schedule 11.1	Two ICPs updated to "ready" after electrical connection.	Strong	Low	1	Identified
Provision of the initial electrical connection date	3.5	7(2A) of Schedule 11.1	Ten late updates of the initial electrical connection date.	Strong	Low	1	Identified
Connection of an ICP that not an NSP	3.6	11.17	Two ICPs electrically connected prior to a trader being recorded as having accepted responsibility.	Strong	Low	1	Identified
Connection of an ICP that is not an NSP	3.7	10.31	Two ICPs connected without agreement from the trader.	Strong	Low	1	Identified
Registry updates	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Moderate	Low	2	Identified
Notice of NSP for each ICP	4.4	2 Schedule 11.1	187 ICPs with insufficient details to be readily locatable.	Moderate	Low	2	Identified
Registry accuracy	4.6	7(1) Schedule 11.1	36 incorrect initial electrical connection dates. 1 ICP with distributed generation details missing.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			1 ICP with incorrect unmetered load details.				
Management of "decommissioned" status	4.11	20 Schedule 11.1	Two ICPs decommissioned in Gentrack but at the incorrect status in the registry.	Moderate	Low	2	Identified
					Future Risk Rating	**13**	

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
Temporary electrical connection	3.8	Liaise with MEPs and traders to review the temporary electrical connection process.
ICP location address	4.4	Liaise with MEPs and traders to get location details.
Distributed generation	4.6	Check EIEP1 file for missing distributed generation.

ISSUES

Subject	Section	Recommendation	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

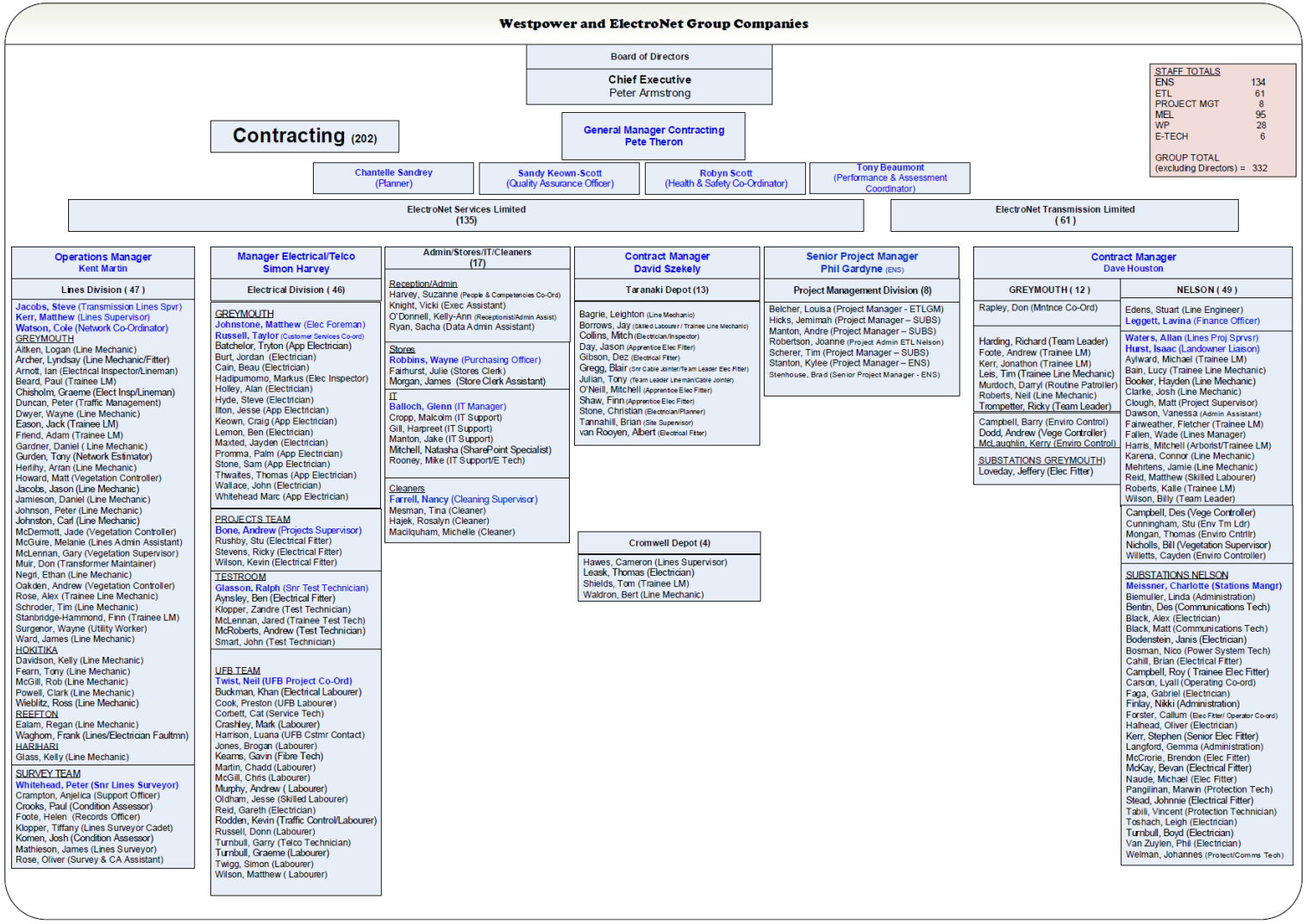
The Electricity Authority website was checked to determine whether Westpower has any Code exemptions in place.

Audit commentary

Review of exemptions on the Electricity Authority website confirmed that there are no exemptions in place for Westpower.

1.2. Structure of Organisation

Westpower provided an organisation chart and the relevant parts are shown below.



1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

Veritek Limited

Electricity Authority Approved Auditor

Westpower personnel assisting in this audit were:

Name	Title
Cosmin Cosma	Asset Manager
Raelene Costello	Connections Co-ordinator
Rodger Griffiths	General Manager - Assets & Engineering Services

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

Westpower were asked to provide the details of any sub-contractors authorised to perform electrical connection activities on their networks.

Audit commentary

All electrical connections are carried out by Electronet on the Westpower network. Electronet are part of the same group of companies. No sub-contractors are used.

1.5. Supplier list

As mentioned above Electronet carry out all electrical connections on the Westpower network. No sub-contractors are used.

1.6. Hardware and Software

Westpower uses a variety of systems to manage their customers:

- Maximo is used as their workflow tool. All work in progress is tracked and is visible via a dashboard;
- Gentrack – customer management including interfacing with the registry;
- ARC is used for the GIS system; and
- Mind Manager for all process documentation.

1.7. Breaches or Breach Allegations

The Electricity Authority confirmed that there have been no alleged breaches related to this audit scope for Orion for the audit period.

1.8. ICP and NSP Data

Westpower has responsibility for the Westpower local network. There have been no changes during the audit period. The table below sets out the details.

Distributor	NSP POC	Description	Balancing Area	Network Type	Start Date	No of ICPs
WPOW	ATU1101	ATARAU	WCOTHERWPOWG	G	1/05/2008	1
WPOW	DOB0331	DOBSON	WCOTHERWPOWG	G	1/05/2008	2,873
WPOW	GYM0661	GREYMOUTH	WCOTHERWPOWG	G	1/05/2008	4,387
WPOW	HKK0661	HOKITIKA	WCOTHERWPOWG	G	1/05/2008	4,524
WPOW	KUM0661	KUMARA	WCOTHERWPOWG	G	1/05/2008	620
WPOW	OTI0111	OTIRA	WCOTIRAWPOWG	G	1/11/2012	41
WPOW	RFN1101	REEFTON	WCOTHERWPOWG	G	1/05/2008	809
WPOW	RFN1102	REEFTON	WCOTHERWPOWG	G	1/05/2008	568

There are no embedded networks connected to the Westpower network.

Westpower provided a list of all ICPs as at 31/07/20 by way of a registry "list file". A summary of this data by "ICP status" is as follows:

Status	Number of ICPs 2020	Number of ICPs 2018	Number of ICPs 2017
New (999,0)	34	9	5
Ready (0,0)	2	0	0
Active (2,0)	13,823	13,582	13,467
Distributor (888,0)	0	-	-
Inactive – new connection in progress (1,12)	17	20	15
Inactive – electrically disconnected vacant property (1,4)	755	777	833
Inactive – electrically disconnected remotely by AMI meter (1,7)	13	14	14
Inactive – electrically disconnected at pole fuse (1,8)	6	10	3
Inactive – electrically disconnected due to meter disconnected (1,9)	6	3	1
Inactive – electrically disconnected at meter box fuse (1,10)	1	0	0
Inactive – electrically disconnected at meter box switch (1,11)	1	1	0
Inactive – electrically disconnected ready for decommissioning (1,6)	8	8	18
Inactive – reconciled elsewhere (1,5)	0	-	-
Decommissioned (3)	1,335	1,254	1,177

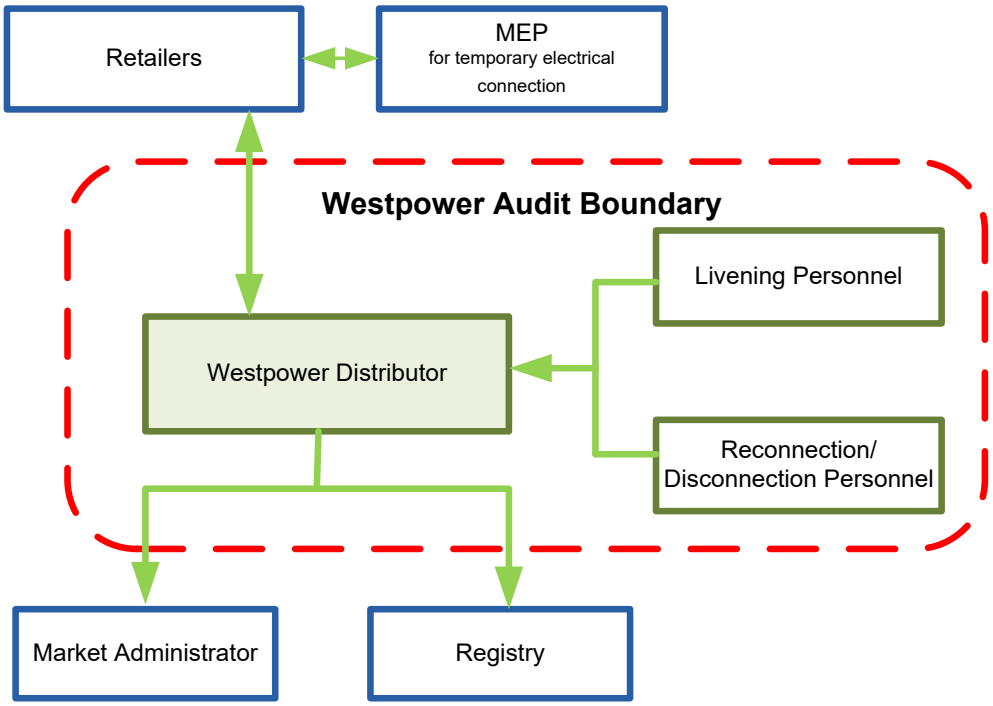
1.9. Authorisation Received

An authorisation letter was provided.

1.10. Scope of Audit

This Distributor audit was performed at the request of Westpower, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at Westpower's premises in Greymouth, on 23rd September 2020.

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



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

1.11. Summary of previous audit

The previous audit conducted in October 2018 by Ewa Glowacka was reviewed. The table below shows current the status of the findings from that audit.

Table of non-compliance

Subject	Section	Clause	Non-compliance	Status
Complete and accurate information	2.1	11.2(1)	For 80 ICPs the address recorded in the registry does not allow them to be readily located	Still existing
Timeliness of provision of IECD to the registry	3.5	7(2A) of Schedule 11.1	Initial Electrical Connection Date for 0000878611WP606 was uploaded to the registry after 44BD.	Still existing
Changes to registry information	4.1	8 of Schedule 11.1	Very small number of updates of pricing and network updates	Still existing
ICP location addresses	4.4	2 of Schedule 11.1	Addresses for 80 ICPs does not allow them to be readily allocated	Still existing

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 11.2(1)

Code related audit information

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

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

Audit observation

Westpower's data management processes were examined. The list file as at 31/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 were examined to confirm compliance.

Audit commentary

Westpower has robust validation processes in place. Registry notification files are checked daily and the audit compliance reporting is used to check for discrepancies.

Examination of the initial electrical connection dates indicates that the incorrect date was populated due to the MEP temporarily electrically connecting ICPs to certify metering. This is recorded as non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11.2(1) From: 01-Aug-18 To: 31-Jul-20	Incorrect initial electrical connection dates populated for 36 ICPs. 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 overall they mitigate risk to an acceptable level. There is no impact to the market therefore I have rated the audit risk rating as low.		
Actions taken to resolve the issue		**Completion date**	**Remedial action status**
We will liaise with both Traders and MEPs to resolve this issue.		Jan 2021	Identified
Preventative actions taken to ensure no further issues will occur		**Completion date**	
Implement an alert process from the Trader/MEP.		Jan 2021	

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

Code reference

Clause 11.2(2)

Code related audit information

If the participant becomes aware that in providing information under this Part, the participant has not complied with that obligation, the participant must, as soon as practicable, provide such further information as is necessary to ensure that the participant does comply.

Audit observation

Westpower's data management processes were examined. The list file as at 31/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 were examined to confirm compliance.

Audit commentary

Westpower has robust validation processes in place. Registry notification files are checked daily and the audit compliance reporting is used to check for discrepancies. Any corrections required are made as soon as practicable.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

The new connection process was examined in detail and is described in **section 3.2** below. Nine new connection applications of the 293 created were sampled using diverse characteristic methodology from the point of application through to when the ICP was created. This included the only unmetered load ICP and the one with distributed generation associated.

Audit commentary

The process in place is robust and has good controls in place. There are no embedded networks on the Westpower network. The sample checked in **section 3.2** below confirms this.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

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

Audit observation

The new connection process was examined in detail. Nine new connection applications of the 293 created during the audit period were checked from the point of application through to when the ICP was created. These were selected using the diverse characteristic methodology to confirm the process and controls worked in practice.

Audit commentary

The new connections process was reviewed and is set out below:

1. An application for a connection is made online by the customer or the customer's agent. The contractor is expected to nominate the retailer. The application includes the proposed livening date.
2. Westpower has an engineering approval process at this point this determines whether the connection is simple or requires a network extension.

3. If the connection is a simple connection, the ICP is created and issued to the applicant along with a network connection agreement. The applicant sends this notification onto the nominated trader. The agreement is valid for six months. Beyond this the application will need to be assessed before it can proceed.
4. The nominated trader must provide an acceptance to Westpower before the ICP is made "ready" on the registry. There are no blanket agreements with traders in place.
5. If the connection requires a network extension, the network engineer assesses these. Once the requirements are determined, the proposal is sent to the applicant for approval. Once accepted, a deposit is paid and the ICP is created and issued to the applicant. The ICP is only made ready once the proposed trader has accepted the nomination and the network extension work is complete.

The process above achieves compliance with the Code. As the customer applies to Westpower in the first instance the 3-day rule does not apply. I reviewed a typical sample of nine ICPs including one with a new unmetered load. Compliance is confirmed

Audit outcome

Compliant

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

Code reference

Clause 11.7

Code related audit information

The distributor must provide information about ICPs on its network in accordance with Schedule 11.1.

Audit observation

The new connection process for populating all required registry fields was examined. The list file was examined for all ICPs created during the audit period.

Audit commentary

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. 293 ICPs were created during the audit period. All ICPs had the required information populated as required by this clause. The accuracy of this information is detailed in **section 4.6**. Compliance is confirmed for clause 11.7 because all required information is populated in the registry.

Audit outcome

Compliant

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

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

The new connection process was examined. The registry list for 31/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 were examined to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. There were 239 ICPs new ICPs were created and electrically connected.

The audit compliance report identified two of the 239 ICPs (99.2% compliance) were made ready after electrical connection had occurred. These were examined and found:

- ICP 0000830286WPEBF, was electrically connected by the trader before they had accepted the nomination, hence this caused the ICP to made "ready" after electrical connection had occurred; and
- ICP 0000492132WP962 was electrically connected on 05/02/19 but not made "ready" until 22/02/19 due to late paperwork back from the field and the trader not accepting responsibility until 22/02/19.

Overall, the timeliness of information to the registry for new connections is high and Westpower's processes are robust.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.4 With: Clause 7(2) of Schedule 11.1 From: 05-Feb-19 To: 19-May-19	Two ICPs updated to "ready" after electrical connection. 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. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
This was raised as a non-compliance with the QA department for our Service Provider at the time. To our knowledge, there have been no further occurrences	2 October 2020	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Our new connection process has a step to ensure a trader accepts responsibility and is recorded in the Registry.	2 October 2020	

3.5. Timeliness of Provision of Initial electrical connection Date (Clause 7(2A) of Schedule 11.1)

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

The distributor must provide the information specified in sub-clause (1)(p) to the registry no later than 10 business days after the date on which the ICP is initially electrically connected.

Audit observation

The new connection process for populating all required registry fields was examined. The registry list for 1/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 were examined to determine the timeliness of the provision of the initial electrical connection date. All ten late updates were examined.

Audit commentary

The paperwork is returned from the field and then updated in Gentrack. The process for updating the registry is automated for all fields, and the update occurs on a nightly basis.

The Maximo system is monitored to track all work in progress. In addition to this, the audit compliance report is checked regularly to identify any ICPs electrically connected but without and initial electrical connection date populated.

There were 321 initial electrical connection date updates in the event detail report. The audit compliance report identified nine (2.8%) late updates. These were examined and found:

- five were due to the late receipt of paperwork from the field;
- two were corrections to the initial electrical connection date. The first date populated was populated within ten business days;
- the remaining two ICPs were identified on the audit compliance report. The paperwork was chased and updated on the registry once received.

The accuracy of the initial electrical connection dates is discussed in **section 4.6**.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 05-Oct-18 To: 10-Jul-20	Ten late updates of the initial electrical connection date. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are recorded as strong because they mitigate risk to an acceptable level. The audit risk rating is assessed to be low as this has no direct impact on reconciliation.

Actions taken to resolve the issue	Completion date	Remedial action status
We are working with the Service Provider to reinforce the importance of timely filing of paperwork.	31/12/2020	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
A role will be established by the Service Provider to manage the compliance of staff doing this work including meeting regulatory timeframes around livening notifications. This will include appropriate training.	31/12/2020	

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 electrically connecting an ICP that is not also an NSP, follow the electrical connection process set out in Clause 10.31.

The distributor must not electrically 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 electrically 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 31/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 were examined.

Audit commentary

As discussed in **section 3.2**, Westpower 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 two 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.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.6 With: Clause 11.17 From: 05-Feb-19 To: 19-May-19	Two ICPs electrically connected prior to a trader being recorded as having accepted responsibility. 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. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
This was raised as a non-compliance with the QA department for our Service Provider at the time. To our knowledge, there have been no further occurrences	2/10/2020	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Our new connection process has a step to ensure a trader accepts responsibility and is recorded in the Registry.	2/10/2020	

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 31/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/2 were examined.

Audit commentary

As discussed in **section 3.2**, Westpower 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.

There were 239 ICPs new ICPs were created and electrically connected. Two ICPs were connected prior to the trader accepting responsibility. This is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.7 With: Clause 10.31 From: 05-Feb-19 To: 19-May-19	Two ICPs connected without agreement from the trader. 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. The impact on settlement and participants is minor; therefore, the audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
This was raised as a non-compliance with the QA department for our Service Provider at the time. To our knowledge, there have been no further occurrences	2/10/2020	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Our new connection process has a step to ensure a trader accepts responsibility and is recorded in the Registry.	2/10/2020	

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 **section 3.2**. The combined registry compliance audit reports covering the period from 1/08/18 to 31/07/2 were examined.

Audit commentary

The new connection process is described in **section 3.2**. There were 239 ICPs new ICPs were created and electrically connected. No requests from MEP's have been received to temporarily electrically connect an ICP.

The audit compliance report found 33 ICPs where the meter certification date was earlier than the initial electrical connection date. I examined an extreme example of all nine ICPs with meters certified more than nine days earlier than the initial electrical connection date and found the initial electrical connection date matched the trader's first active date in all instances and was the date Electronet fitted the fuse. It appears that the MEP has temporarily electrically connected the ICP prior to this to certify the meter. The code defines the initial electrical connection date to be:

*"the date on which the **ICP** is initially **electrically connected**."*

Therefore, the initial electrical connection date recorded is incorrect. This is recorded as non-compliance in **section 4.6.** I recommend that Westpower liaise with the traders and MEPs to review this process.

Recommendation	Description	Audited party comment	Remedial action
Temporary electrical connection	Liaise with MEPs and traders to review the temporary electrical connection process.	Westpower will liaise with both Traders and MEPs to request advice of intension to temporarily electrically connect an ICP.	Identified

Audit outcome

Compliant

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

Code reference

Clause 10.30

Code related audit information

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

The distributor must, within 5 business days of connecting the NSP that is not a point of connection to the grid, advise the reconciliation manager of the following in the prescribed form:

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

Audit observation

The NSP mapping table was reviewed.

Audit commentary

Westpower has not created any new NSPs during the audit period.

Audit outcome

Not applicable

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

Code reference

Clause 10.30(A)

Code related audit information

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

No new NSPs were created by Westpower during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 1(1) Schedule 11.1

Code related audit information

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

yyyyyyyyyyxxccc where:

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

Audit observation

The new connection process was examined, and a sample checked. This is detailed in **section 3.2** above.

Audit commentary

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

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

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

Audit commentary

Westpower has 14 loss category codes assigned to ICPs. Each active ICP only has one loss category, which clearly identifies the relevant loss factor.

Audit outcome

Compliant

3.13. Management of "new" status (Clause 13 Schedule 11.1)

Code reference

Clause 13 Schedule 11.1

Code related audit information

The ICP status of "New" must be managed by the distributor to indicate:

- *the associated electrical installations are in the construction phase (Clause 13(a) of Schedule 11.1)*
- *the ICP is not ready for activation (Clause 13(b) of Schedule 11.1).*

Audit observation

The management of ICPs in relation to the use of the "new" status was examined. The registry compliance audit report covering the period from 1/08/17 to 31/07/20 was examined to identify any ICPs that had been at "new" and "ready" for more than 24 months.

Audit commentary

All ICPs are created at the "new" status and they are changed to "ready" once the trader has accepted the nomination and any network extension work required is completed. Checks of the sample of nine ICPs recorded in **section 3.2** confirmed compliance. There are no ICPs at the "new" status with an initial electrical connection date.

There were no ICPs at the "new" or "ready" for greater than 24 months.

Audit outcome

Compliant

3.14. Monitoring of "new" & "ready" statuses (Clause 15 Schedule 11.1)

Code reference

Clause 15 Schedule 11.1

Code related audit information

If an ICP has had the status of "New" or has had the status of "Ready" for 24 calendar months or more:

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

Audit observation

The combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 was examined to identify any ICPs that had been at "new" and "ready" for more than 24 months.

Audit commentary

Westpower monitors any ICPs at "New" or "Ready" for longer than 12 months to confirm if they are still required or not. There are three ICPs that have been at "Ready" for longer than 24 months and these have been confirmed as still required.

Audit outcome

Compliant

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

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

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

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

Audit observation

This requirement was discussed, and the list file was examined.

Audit commentary

Westpower has a good understanding of this requirement. Examination of the list file confirmed that they do not have any embedded generation stations with a capacity of 10MW or more that require an individual loss category code.

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

The electrical connection of street light circuits, which are a point of connection, was examined.

Audit commentary

There are very few new streetlight connections. Any new unmetered load connections require approval before being processed and are tracked in the same way as a new ICP request. Westpower's contracting division ElectroNet manage all the streetlight databases on the Westpower network. All the streetlight data is recorded in ARC GIS. The process is robust and the accuracy of the streetlight databases confirms this.

Audit outcome

Compliant

4. MAINTENANCE OF REGISTRY INFORMATION

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

Code reference

Clause 8 Schedule 11.1

Code related audit information

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

Notification must be given by the distributor within three business days after the change takes effect, unless the change is to the NSP identifier of the NSP to which the ICP is usually connected (other than a change that is the result of the commissioning or decommissioning of an NSP).

In those cases, notification must be given no later than eight business days after the change takes effect.

If the change to the NSP identifier is for more than 10 business days, the notification must be provided no later than the 13th business day and be backdated to the date the change took effect.

In the case of decommissioning an ICP, notification must be given by the later of 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 31/05/20 and the registry compliance audit report covering the period from 1/01/19 to 31/05/20 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.

Audit commentary

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis.

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

Update	Date	Late	% Compliant	Average days
Address	2017	0	100%	-
	2018	0	100%	-
	2020	0	100%	-
Price codes	2017	10	95.5%	-
	2018	14	94.6%	-
	2020	25	91.7%	-
Status	2017	-	-	-
	2018	-	-	-
	2020	14	46.88%	5.09
Network (excl new connection & Distributed Generation)	2020	0	100%	-
Distributed Generation	2020	11	22.22%	111.56
NSP changes	2020	0	-	-

Address events

All address updates were provided within three business days.

Pricing events

Westpower do not backdate pricing requests more than three business days unless Westpower have the incorrect price code applied. The extreme sample of five ICPs were examined and found all were corrections.

Status events

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

The updating of decommissioning events was not evaluated in the 2018 audit. The combined audit compliance reporting found 14 late status updates. These were examined and found eight were due to late notification. Two ICPs were found to be decommissioned in Gentrack but not on the registry. These were confirmed with the trader to be decommissioned and then corrected on the registry.

Network events (other than NSP changes and Distributed Generation events)

The audit compliance reporting indicated 42 late network events. These were analysed and found that all 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**.

Distributed Generation events

The distributed generation process is described in **section 4.6**. The 11 late distributed generation updates checked found these were all late due to late notification.

NSP changes

NSP changes are managed manually and Westpower try to avoid any NSP changes lasting for more than ten business days so notification is not required. Review of the audit compliance reporting confirmed that no NSP changes were notified late.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Aug-18 To: 31-Jul-20	Updates to registry backdated greater than 3 business days of the event. 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. Overall Westpower has robust controls but the distributed generation process requires review to improve the timeliness of these updates. The audit risk rating is low as the volume of backdated events is small.

Actions taken to resolve the issue	Completion date	Remedial action status
An audit is being undertaken of all approved DG connections to ensure that our data is accurate.	31/12/20	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
We will update our CIWR process to include a DG workflow and treat these like other new connections, ensuring that all of the data entry is carried out in an accurate and timely fashion. If necessary, we can include penalties on non-compliant installers.	31/12/20	

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

Code reference

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

Code related audit information

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

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

Audit observation

The process to determine the correct NSP was examined. The audit compliance reporting identified seven active ICPs where 10% or fewer ICPs on a street have a different NSP and there are fewer than three ICPs with a different NSP. These were examined to determine if the correct NSP has been assigned.

Audit commentary

The controls in place to ensure new ICPs have the correct NSP are robust, all new connections are mapped on the GIS system ensuring that the correct transformer and therefore the correct NSP is assigned.

The audit compliance reporting identified seven ICPs with potentially the incorrect NSP assigned. These were examined and found all were correctly mapped.

Audit outcome

Compliant

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

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

Audit observation

The management of customer queries was discussed to confirm policy.

Audit commentary

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

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

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

Audit observation

The process to determine correct and unique addresses was examined. The list file as at 31/07/20 and the combined audit compliance report coving the audit period were examined.

A diverse sample of 20 ICPs were checked to determine if they are readily locatable.

Audit commentary

Gentrack will not allow a duplicate address to be created. All ICPs are checked on the GIS to correctly locate them. Westpower receives regular council address updates and these are loaded to ARC GIS.

The audit compliance report recorded three active ICPs where the address not readily locatable. These were all examined and found all were not readily locatable as they had no unit or street number or property name. Westpower examined these and have added the building name for two ICPs. ICP 0000880196WP918 is being investigated to confirm locatable details.

A check of the list file identified 187 active ICPs that had no street number and potentially insufficient details to readily locate these ICPs (this includes the three identified in the audit compliance report). 96 of these have a lot and DP number recorded. This is due to the ICP applications only having a lot and DP number and there is no process to update these once the ICP is created unless the Westpower are advised of the details at a later date by the retailer or the updated address is found when checking the GIS. The sample of 27 ICPs checked found:

- 14 now have sufficient details to make them readily locatable; and
- 13 require further investigation.

The majority of the ICPs without sufficient location details have a meter installed. I recommend that the MEP or trader is contacted to see if they can provide location details to resolve these.

Recommendation	Description	Audited party comment	Remedial action
ICP location address	Liaise with MEPs and traders to get location details.	Westpower will liaise with MEPs, Traders and Councils to obtain accurate location details.	Identified

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.4 With: Clause 2 of Schedule 11.1 From: 01-Aug-18 To: 31-Jul-20	187 ICPs with insufficient details to be readily locatable. 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 robust as they will mitigate risk most of the time. The audit risk rating is low as this has no direct impact on reconciliation but could affect meter readers ability to get manual reads.

Actions taken to resolve the issue	Completion date	Remedial action status
We have an on-going project to update addresses.	30/09/2021	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Accurate addresses with identifiers are uploaded for all new ICPs.	30/09/2021	

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 de-energised without de-energisation of 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 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.

Audit commentary

Westpower has required that all ICPs created since 7 October 2002 will comply with this clause.

Audit outcome

Compliant

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

Code reference

Clause 7(1) Schedule 11.1

Code related audit information

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

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
  - *a) the unique loss category code assigned to the ICP*
  - *b) the ICP identifier of the ICP*
  - *c) the NSP identifier of the NSP to which the ICP is connected*
  - *d) the plant name of the embedded generating station*
- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*

- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
  - *a) a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
  - *b) a blank chargeable capacity if the capacity value can be determined for a billing period from metering information collected for that billing period*
  - *c) if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-*

    (i) no capacity value recorded in the registry field for the chargeable capacity; and

    (ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded
  - *d) if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-*

    (i) the annual capacity value recorded in the registry field for the chargeable capacity; and

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

Audit observation

The process for updating the registry is automated for all fields, and the update occurs on a nightly basis. Westpower has a fully automated registry update process, which ensures all information listed in this clause is provided to the registry.

The registry list as at 31/07/20 and the audit compliance report for the audit period from 1/08/18 to 31/07/20 were reviewed to determine compliance. A sample using the typical characteristics methodology of data discrepancies or all if there were less than ten ICPs were checked.

Audit commentary

Registry data validation processes are discussed in **section 2.1**. All ICP information was checked and confirmed compliant unless discussed below.

Initial electrical connection date

The initial electrical connection date is populated based on information returned from the field. Electronet are carry out the electrical connections on the Westpower network. The Maximo system is monitored to track all work in progress. In addition to this, the audit compliance report is checked regularly to identify any ICPs electrically connected but without and initial electrical connection date populated.

239 new ICPs were created and electrically connected during the audit period. The audit compliance reporting identified 45 ICPs with date inconsistencies between the initial electrical connection date, the active date and the meter certification date. 33 of these had certifications earlier than the active date. I examined a sample of ten of these in **section 3.8** and found the MEPs are temporarily electrically connecting the ICP to certify the meter. Therefore, Westpower are recording the incorrect initial electrical connection date. I recommend that Westpower liaise with the traders and MEPs to review this process. This is recorded as non-compliance below.

The remaining 12 ICPs were checked. For eight of these the initial electrical connection date matched that of the trader, and these were certified after electrical connection. The remaining four ICPs were checked and found:

ICP	Earliest meter Certification date	Initial Electrical Connection date	Earliest retailer active date	Comments
0000486295WP1D5	15/11/2019	14/11/2019	15/11/2019	The incorrect date was provided from the field. This has been corrected to match the trader's active date.
0000448111WPAE6	22/03/2019	27/02/2019	22/03/2019	Paperwork was provided confirming the electrical connection date of 27/02/19, however the earlier meter certification date suggests this was electrically connected earlier.
0000906292WP598	08/01/2019	07/01/2019	08/01/2019	Paperwork was provided confirming the electrical connection date of 07/01/19, however the earlier meter certification date suggests this was electrically connected earlier. .
0000780495WPEA7	28/08/2018	28/08/2018	30/08/2018	Paperwork was provided confirming the electrical connection date of 28/08/18. The traders first active date is incorrect

The audit compliance report confirmed that there were no missing initial electrical connection dates and there were no ICPs at "inactive- new connection in progress" with an initial electrical connection date populated.

Distributed Generation

Applications for distributed generation are made online. The application form requires the details of the inverter and any batteries if being installed. All applications are reviewed prior to approval. Westpower require that they are present at the time of electrical connection. This is not always followed and Westpower often find out much later that the distributed generation has been connected. The details are then loaded to the registry once the installation is complete. This is causing many a large proportion of these updates to be late as detailed in **section 4.1**. Westpower are reviewing this process. I recommend that the EIEP1 file is checked to identify any missing distributed generation.

Recommendation	Description	Audited party comment	Remedial action
Distributed generation	Check EIEP1 file for missing distributed generation.	We agree that is a good step and we will implement this.	Identified

Analysis of the registry list confirmed there are 56 ICPs with generation capacity recorded. All ICPs with generation capacity have a fuel type and installation type of "B" or "G" recorded on the registry. I checked a typical sample of the 11 ICPs and confirmed that the correct values have been recorded on the registry.

The audit compliance report identified two active ICPs where the trader's profile indicates distributed generation. These were checked and found:

- ICP 0000759038WP513 has since been confirmed as distributed generation installed and this has been updated on the registry; and
- Westpower have had no application for ICP 0000410320WP528. Injection metering is present. Westpower are checking with the trader to confirm if distributed generation is present.

Unmetered Load

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

New unmetered load connections are allowed but must be approved by the General Manager. There has been one new unmetered loads connected during the audit period. ICP 0000444105WPAC1 is an unmetered defibrillator. I confirmed that Westpower have the correct daily kWh value recorded. The trader's value is incorrect.

Westpower uses the Electricity Authority's recommended format to populate the registry. There 117 ICPs where Westpower have a standard unmetered load recorded. These were examined and found 15 ICPs that had a daily 0.1kWh or greater variance with the trader's details. These were examined and found ICP 0000548210WP1CC with the incorrect load recorded. The remaining 14 ICPs were confirmed to be correct.

Dedicated vs non-dedicated

All but one active ICP are recorded as non-dedicated. ICP 0000100018WP6F5 is recorded as non-dedicated and is an unmetered load with a daily kWh figure of zero. This is the ICP for the Otira residual load. There is no embedded network but the ICP volume is calculated by subtracting the ICPs downstream from it and the remaining value is reconciled against this ICP for the large fans used to keep the rail tunnels clear through the mountains. This is an historic issue where no one is willing to bear the cost of the 11kV metering required to meter the fans downstream of the houses. This is non-compliant for the trader.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.6 With: Clause 7(1) Schedule 11.1 From: 01-Aug-18 To: 31-Jul-20	36 incorrect initial electrical connection dates. 1 ICP with distributed generation details missing. 1 ICP with incorrect unmetered load details. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are rated as moderate. Overall Westpower has robust controls but the distributed generation process requires review and the accuracy of the initial electrical connection dates needs investigation. The audit risk rating is assessed to be low as the volume of ICPs affected is small.

Actions taken to resolve the issue	Completion date	Remedial action status
Westpower will liaise with MEPs and Traders to resolve these issues. Site visits will be carried out as required.	31/12/20	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
We will continue to reinforce the need to comply with our workflow and processes as per the CIWR standard.	31/12/20	

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

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

The distributor must provide the following information to the registry no later than 10 business days after the trading of electricity at the ICP commences:

- *the actual price category code assigned to the ICP (Clause 7(3)(a) of Schedule 11.1)*
- *the actual chargeable capacity of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(b) of Schedule 11.1)*
- *the actual distributor installation details of the ICP determined by the price category code assigned to the ICP (if any) (Clause 7(3)(c) of Schedule 11.1).*

Audit observation

The management of registry information was reviewed. The audit compliance reporting and the registry list were reviewed to determine compliance.

Audit commentary

Westpower do not use placeholder values; the price category is applied based on the application details.

There were no backdated pricing changes found that related to new connections.

Audit outcome

Compliant

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

Code reference

Clause 7(8) and (9) Schedule 11.1

Code related audit information

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

Audit observation

I checked the list file for ICPs with GPS coordinates.

Audit commentary

GPS co-ordinates are not 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 for 31/07/20 and the combined registry compliance audit reports covering the period from 1/08/18 to 31/07/20 were examined.

All ICPs at "ready" status had a single price category assigned and proposed trader identified.

Audit commentary

The status of "ready" is used once the ICP is ready for connection. The new connection process has a step to confirm the trader has taken responsibility. All ICPs only have one price category code.

Audit outcome

Compliant

4.10. Management of "distributor" status (Clause 16 Schedule 11.1)

Code reference

Clause 16 Schedule 11.1

Code related audit information

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

Audit observation

I checked the list file to confirm compliance.

Audit commentary

The list file no "distributor" status ICPs.

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

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

Audit commentary

A work order is produced for all decommissioning requests. Once received back and confirmed complete the ICP is updated to decommissioned in Gentrack and this then writes to the registry overnight. Westpower also monitor ICPs that have been inactive for a long period and check with the trader if the ICP is still required or can be decommissioned.

Two ICPs were found to be decommissioned in Gentrack but were "Inactive vacant" on the registry. These were confirmed with the trader to be decommissioned and then corrected on the registry. This is recorded as non-compliance below.

I checked the accuracy of the decommissioning date for a sample of ten ICPs and found the correct date is recorded except in instances where the MEP's meter removal date is later than that of the decommissioning date. In these instances Westpower have no choice but to use the meter removal date as the decommissioning date as the registry will not allow the decommission date to predate the meter removal date which in some instances will be after the site has been decommissioned.

There are eight ICPs with a status of "ready for decommissioning". These are all historic (2013-2016) and were examined during the site audit and found all require a site visit to confirm the correct status.

The timeliness of status updates is discussed in **section 4.1**.

Audit outcome

Non-compliant

<table>
<tr><th>Non-compliance</th><th colspan="3">Description</th></tr>
<tr><td>Audit Ref: 4.11
With: Clause 20 Schedule 11.1

From: 01-Aug-18
To: 31-Jul-20</td><td colspan="3">Two ICPs decommissioned in Gentrack but at the incorrect status in the registry.
Potential impact: Low
Actual impact: Low
Audit history: None
Controls: Moderate
Breach risk rating: 2</td></tr>
<tr><th>Audit risk rating</th><th colspan="3">Rationale for audit risk rating</th></tr>
<tr><td>Low</td><td colspan="3">Controls are rated as moderate. The process in place ensures that the majority of ICPs are managed correctly.
The audit risk rating is low as there were only two ICPs at the incorrect status.</td></tr>
<tr><th colspan="2">Actions taken to resolve the issue</th><th>Completion date</th><th>Remedial action status</th></tr>
<tr><td colspan="2">A new decommissioning process has been put in place. Site visits will be carried out to resolve and update historical information.</td><td>31/12/20</td><td rowspan="3">Identified</td></tr>
<tr><th colspan="2">Preventative actions taken to ensure no further issues will occur</th><th>Completion date</th></tr>
<tr><td colspan="2">We will reinforce the need for the Service Provider to comply with the new process and timeframes and we will monitor their performance.</td><td>31/12/20</td></tr>
</table>

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

Code reference

Clause 23 Schedule 11.1

Code related audit information

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

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

A price category code takes effect on the specified date.

Audit observation

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

Audit commentary

There were no changes during the audit period.

Audit outcome

Compliant

5. CREATION AND MAINTENANCE OF LOSS FACTORS

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

Code reference

Clause 21 Schedule 11.1

Code related audit information

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

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

A loss category code takes effect on the specified date.

Audit observation

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

Audit commentary

There were no changes 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 on the registry, the distributor must enter the replaced loss factor on the table in the registry.

Audit observation

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

Audit commentary

There were no changes during the audit period.

Audit outcome

Compliant

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

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

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

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No NSPs were created or decommissioned during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

Westpower has not created any embedded networks.

Audit outcome

Compliant

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

Code reference

Clause 24(2) and (3) Schedule 11.1

Code related audit information

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No balancing areas were changed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 27 Schedule 11.1

Code related audit information

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

Audit observation

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 notify the market administrator in the prescribed form, no later than three business days before the transfer takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

Westpower 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))

Code reference

Clause 10.25(1)

Code related audit information

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

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

Audit observation

The NSP supply point table was examined.

Audit commentary

There is one interconnection point relevant to this clause and an exemption has been granted to allow for this to be unmetered.

Audit outcome

Compliant

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

Code reference

Clause 10.25(2)

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

Westpower have not connected 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 notify:

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

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

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Westpower have not initiated any changes of network owner.

Audit outcome

Compliant

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

Code reference

Clause 10.22(1)(b)

Code related audit information

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Westpower is not an embedded network owner and has not requested the connection of any NSPs.

Audit outcome

Compliant

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

Code reference

Clauses 5 and 8 Schedule 11.2

Code related audit information

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

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

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Westpower 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

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

Audit outcome

Compliant

7. MAINTENANCE OF SHARED UNMETERED LOAD

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

Code reference

Clause 11.14(2) and (4)

Code related audit information

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

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

Audit observation

I checked the list file for any shared unmetered load.

Audit commentary

A check of the list file found no shared unmetered load and Westpower will not allow this to be connected.

Audit outcome

Compliant

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

Code reference

Clause 11.14(5)

Code related audit information

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

Audit observation

I checked the list file for any shared unmetered load.

Audit commentary

A check of the list file found no shared unmetered load and Westpower will not allow this to be connected.

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 calculation of loss factors was reviewed in relation to Clause 11.2, which relates to information accuracy.

I have recorded the information from Part 1 of the Code to support my approach to the evaluation of this area.

The definition of losses is:

losses means the difference between the delivered electricity at a point of connection and the electricity required to be injected into an other point of connection in order to supply the delivered electricity.

This definition indicates that reconciliation losses should be published, not technical losses. I have therefore compared reconciliation losses to published loss factors.

Audit commentary

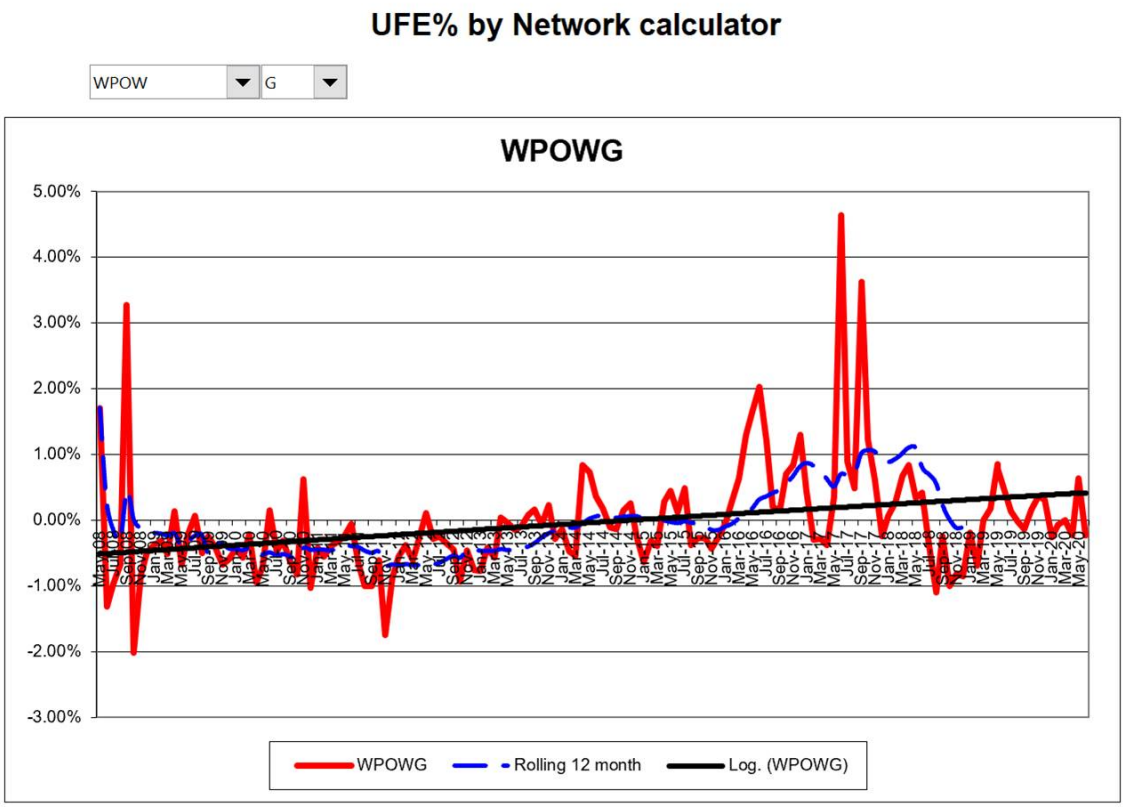
Westpower review their loss calculations regularly by comparing the sum of generated and transmitted energy against offtake energy.

They carry out regular rolling reconciliations of system losses due to the need to deal with seasonal effects and ensure revenue completeness when relying upon retailer information to generate the monthly line charge invoices.

They are currently rolling out a trial of PowerPilot monitoring devices in representative low-voltage networks in the Greymouth area that will measure actual losses in the LV network by comparing measured energy injected from the transformer 400 V terminals against the sum of all offtake energy values measured at the network connection points for each installation. This will be used to inform future loss calculations and can be used as training data for assessing expected loss factors in other parts of the network.

It is therefore expected that the calculation of technical losses will be carried out on a more deterministic basis in the future.

The Electricity Authority provided the UFE graph below:



Westpower's losses are tracking within the accepted +/-1% threshold.

Audit outcome

Compliant

CONCLUSION

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

Westpower have good controls in place for most processes. Two areas of opportunity were identified:

- I found 33 ICPs that had a meter certification earlier than the initial electrical connection date and the trader's first active date indicating that these dates are incorrect. I recommend that Westpower liaise with the traders and MEPs to resolve this.
- The updates for distributed generation are slow as the installers are not following Westpower's direction that they be present when generation is connected. I

Overall the level of compliance is high and controls generally found to be strong.

The indicative audit frequency table indicates that the next audit be in 12 months. I have considered this in conjunction with Westpower's responses and agree with that recommendation.

I thank Raelene and the Westpower team for their co-operation during the audit.

PARTICIPANT RESPONSE

Westpower agrees with all of the findings and recommendations in the report and looks forward to further strengthening its processes and controls to achieve continual improvement in its compliance with the Code requirements.