

ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT



For

MANAWA ENERGY LIMITED
NZBN: 9429038917912

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EXECUTIVE SUMMARY

This distributor audit was performed at the request of **Manawa Energy Limited (Manawa)** 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 version 7.2, which was produced by the Electricity Authority.

Manawa has responsibility for the following NSPs under its DUNW and TRPG participant codes:

POC code	Network participant	Embedded under POC code	Embedded under network participant	Description	Reconciliation type
WPV0061	DUNW	WPG0331	TRPG	WAIPORI VILLAGE	EN
WPG0331	TRPG	HWB0331	DUNE	WAIPORI GENERATION	EN
TWC2201	TRPG			NZ Windfarms	GN

Aurora Network Limited (Aurora) performs all of the relevant functions for Manawa with the exception of network supply point table maintenance, which is carried out by Manawa. Aurora uses the same systems and processes for Manawa and ICPs on their own Aurora network, and their processes are compliant. Aurora's distributor audit report dated 11 May 2022 was reviewed to support my findings on process compliance, and I confirmed that processes were not changed between the audit date and now.

TRPG There were no changes to registry information during the audit period, and no inaccurate ICP data was identified.

There was a technical non-compliance for not having unique loss categories for each ICP with generation capacity over 10 MW. The non-compliance has no impact, because all of the affected ICPs should have the same loss factor value.

DUNW There were a small number of registry data updates, two new connections, and a loss factor update.

The loss factor remains high because of the large transformer capacity relative to the actual load, and is now based on the actual loss ratio for the past two years.

Registry data was found to be accurate except for two new ICPs which did not have initial electrical connection dates populated.

There were some late registry updates caused by backdated corrections, and a loss factor change was entered late.

The audit risk rating is ten, and the audit frequency table indicates that the next audit is due in 12 months. I recommend that the next audit is due in at least 18 months, after considering:

- Manawa's comments,
- that four of the non-compliances (six points) relate to initial electrical connection dates which are missing for two ICPs, and
- the impact of the non-compliances.

The matters raised are set out in the table 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)	DUNW New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded.	Strong	Low	1	
Requirement to correct errors	2.2	11.2(1) and 10.6(1)	DUNW New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded.	Strong	Low	1	
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	DUNW New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded.	Weak	Low	3	
Embedded generation loss category	3.15	7(6) Schedule 11.1	TRPG ICPs 0000207212DE07E, 0001187181WFB22 and 0001190422WF679 have generation capacity over 10 MW but do not have unique loss factor codes recorded.	Strong	Low	1	
Changes to registry information	4.1	8 Schedule 11.1	DUNW Eight late address updates. Two late network updates. 14 late pricing updates.	Moderate	Low	2	
Distributors to Provide ICP Information to the Registry manager	4.6	7(1) Schedule 11.1	DUNW New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded.	Strong	Low	1	
Updating loss factors	5.2	22 Schedule 11.1	DUNW WPVLV was not updated to the new loss factor code value of 1.2063 from 1 April 2022.	Strong	Low	1	
Future Risk Rating						10	

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	Clause	Description
Monitoring of "new" & "ready" statuses	3.14	Status for ICP 0001187170WF770	Confirm whether the residual load ICP is required. If it is required, Trustpower should be asked to update the ICP status to "active" from the correct connection date. If it is not required, the status should be moved to "decommissioned".

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

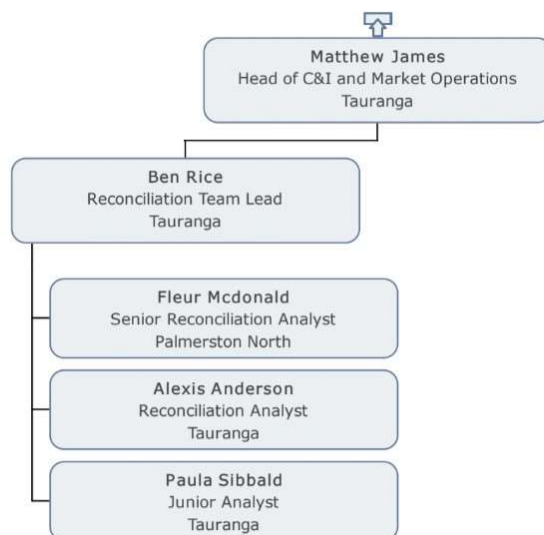
Manawa has no exemptions in place that are relevant to the scope of this audit.

Audit commentary

Not applicable

1.2. Structure of Organisation

Manawa provided a copy of their organisational structure:



1.3. Persons involved in this audit

Auditor:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Personnel assisting in this audit were:

Name	Title	Company
Ben Rice	Reconciliation Team Lead	Manawa
Simeon Dwyer	Network Billing Analyst	Aurora
Jon Stone	Commercial Manager	Aurora

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

Aurora performs all of the relevant functions for Manawa with the exception of network supply point table maintenance, which is carried out by Manawa.

1.5. Supplier list

Aurora performs all of the relevant functions for Manawa with the exception of network supply point table maintenance, which is carried out by Manawa.

1.6. Hardware and Software

Aurora uses the following systems:

- Aurora connection application database for tracking connection applications,
- GTV for ICP creation, line charge billing and source for Registry updates, and
- ARC GIS.

Access to systems is restricted using logins and passwords. All data is backed-up in accordance with standard industry protocols.

1.7. Breaches or Breach Allegations

Manawa has not had any breach allegations recorded by the Electricity Authority within the scope of this audit

1.8. ICP and NSP Data

Review of the NSP table showed Manawa was responsible for the NSPs below as of 2 December 2022.

Dist	NSP POC	Description	Parent POC	Parent Dist	Balancing Area	Type	Start Date	Active ICPs
DUNW	WPV0061	Waipori Village	WPG0331	TRPG	WPV0061DUNWE	EN	1 May 2008	41
TRPG	WPG0331	Waipori Generation	HWB0331	DUNE	WPG0331TRPGE	EN	1 May 2008	116
TRPG	TWC2201	NZ Windfarms			TWC2201TRPGG	GN	1 August 2008	14

The status of ICPs on the DUNW network is listed below.

Status	2022	2020	2019	2018	2017
New (999,0)	-	-	1	-	-
Ready (0,0)	-	-	-	-	-
Active (2,0)	41	38	38	38	38
Distributor (888,0)	-	-	-	-	-
Inactive – new connection in progress (1,12)	-	-	-	-	-
Inactive – electrically disconnected vacant property (1,4)	4	5	4	4	5
Inactive – electrically disconnected remotely by AMI meter (1,7)	-	-	-	-	-
Inactive – electrically disconnected at pole fuse (1,8)	-	-	-	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-	-	-	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	-	-	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-	-	-	1	1
Inactive – reconciled elsewhere (1,5)	-	-	-	-	-
Decommissioned (3)	2	2	2	1	-

The status of ICPs on the TRPG network is listed below.

Status	2022
New (999,0)	-
Ready (0,0)	1
Active (2,0)	3
Distributor (888,0)	1
Inactive – new connection in progress (1,12)	-
Inactive – electrically disconnected vacant property (1,4)	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	-
Inactive – electrically disconnected at pole fuse (1,8)	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-
Inactive – electrically disconnected at meter box fuse (1,10)	-
Inactive – electrically disconnected at meter box switch (1,11)	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-

Status	2022
Inactive – reconciled elsewhere (1,5)	-
Decommissioned (3)	-

1.9. Authorisation Received

Manawa provided authorisation to Veritek, permitting the collection of data from other parties for matters directly related to the audit.

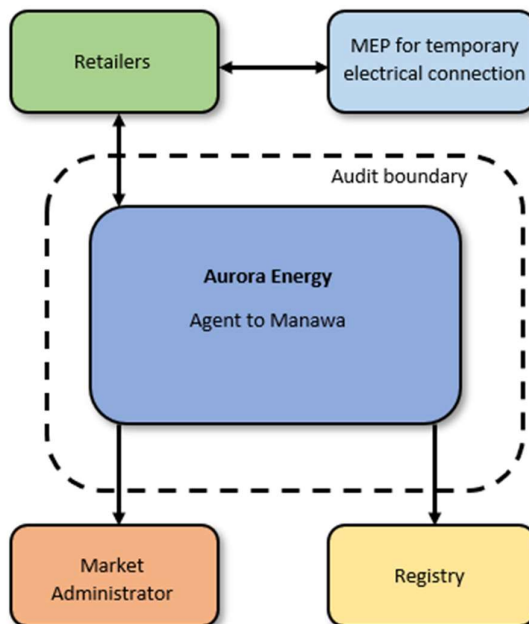
1.10. Scope of Audit

This distributor audit was performed at the request of Manawa 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 table below shows the tasks under clause 11.10(4) of Part 11, which Manawa is responsible for. Manawa subcontracts Aurora to manage all activities covered by the scope of this audit, with the exception of network supply point table maintenance, which is carried out by Manawa.

Functions Requiring Audit Under Clause 11.10(4) of Part 11	Contractors Involved in Performance of Tasks
The creation of ICP identifiers for ICPs.	Aurora
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 audit boundary shown for clarity.



1.11. Summary of previous audit

Manawa provided a copy of the previous audit report, conducted in February 2020 by Steve Woods of Veritek Limited. The audit found one non-compliance. The status of the non-compliance is detailed in the table below.

Subject	Section	Clause	Non-Compliance	Status
Changes to registry information	3.4	7(2) of Schedule 11.1	Late change to "ready" for ICP 0000508580DEC75	Cleared

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 11.2(1) and 10.6(1)

Code related audit information

A participant must take all practicable steps to ensure that information that the participant is required to provide to any person under Parts 10 or 11 is:

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

Audit observation

Aurora's data management processes were examined. Registry lists for TRPG and DUNW were examined to determine compliance.

Audit commentary

Aurora has robust discrepancy reporting and monitoring in place, including the audit compliance reports to identify discrepancies and correct them.

TRPG No inaccurate information was identified for TRPG.

DUNW Two new ICPs which have been connected do not have initial electrical connection dates recorded.

ICP	IECD	Active date	Meter cert date
0000513444DE495	Missing expected to be 21 March 2022	25 March 2022	25 March 2022
0000511212DE854	Missing expected to be 30 November 2020	30 November 2020	30 November 2020

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: Clause 11.2(1) and 10.6(1) From: 30-Nov-20 To: 20-Jan-23	DUNW New ICPS 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded. 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 over data accuracy are strong overall because only two exceptions were identified. The audit risk rating is low because there is no direct impact on submission. Retailers may use this information to check their active dates.		
Actions taken to resolve the issue		Completion date	Remedial action status
These two ICPS have been followed up with Aurora. Aurora have updated the IECD dates for both ICPS		Cleared	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We will discuss with Aurora what actions can be taken to resolve future discrepancies of this nature		30/04/2023	

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

Aurora's data management processes were examined. Registry lists for TRPG and DUNW were examined to determine compliance.

Audit commentary

As noted above Aurora have robust processes and procedures in place to ensure they provide correct and accurate information. Registry notification files are checked daily, and the audit compliance reporting is used to check for discrepancies. Any discrepancies found are investigated and updated as required.

TRPG No inaccurate information was identified for TRPG.

DUNW Two new ICPs which have been connected do not have initial electrical connection dates recorded. The missing initial electrical connection dates were identified during the audit and have not been corrected.

ICP	IECD	Active date	Meter cert date
0000513444DE495	Missing expected to be 21 March 2022	25 March 2022	25 March 2022
0000511212DE854	Missing expected to be 30 November 2020	30 November 2020	30 November 2020

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 2.2</p> <p>With: Clause 11.2(2) and 10.6(2)</p> <p>From: 30-Nov-20</p> <p>To: 20-Jan-23</p>	<p>DUNW</p> <p>New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls over data accuracy are strong overall because only two exceptions were identified.</p> <p>The audit risk rating is low because there is no direct impact on submission. Retailers may use this information to check their active dates.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
These two ICPS have been followed up with Aurora. Aurora have updated the IECD dates for both ICPS		Cleared	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We will discuss with Aurora what actions can be taken to resolve future discrepancies of this nature		30/04/2023	

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

Code reference

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

Code related audit information

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

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

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

Audit observation

The PR-255 file was examined to determine if there were examples of load control switches on the TRPG and DUNW networks. The management of removal and breakage of seals was discussed.

Audit commentary

Aurora do not complete any work requiring a change of seal. Aurora may receive an after-hours call, they will send Delta out to resolve the problem, all work is done under the Delta test house.

TRPG No ICPs on the TRPG network have load control.

DUNW DUNW ICP 0000511212DE854 has a CN16 meter and has been continuously connected since it was initially connected on 30 November 2020. Aurora confirmed that there is no load control on the network.

Audit outcome

Compliant

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

Code reference

Clause 11.30A

Code related audit information

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

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

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

Audit observation

Information provided by Manawa and Aurora regarding Utilities Disputes was examined.

Audit commentary

Clear and prominent information on Utilities Disputes is provided by Manawa on their website under <https://www.manawaenergy.co.nz/customers>.

Manawa do not communicate with or bill customers directly, Aurora does this where required. Compliance is recorded in Aurora's distributor audit report.

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

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were examined to determine compliance.

Audit commentary

Aurora's ICP creation process was reviewed during their distributor audit and found to be compliant.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPS were compliantly created for DUNW during the audit period.

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

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were examined to determine compliance.

Audit commentary

Aurora's ICP creation process was reviewed during their distributor audit and found to be compliant. ICP requests are received directly from customers or their agents via submission on the Aurora Customer portal CRF database.

Aurora creates ICPS at "ready". Notification is sent to the proposed trader, the customer and electrician when the ICP has been approved and created. The trader is expected to notify Aurora if they reject the ICP, and the customer is notified of the rejection.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were compliantly created for DUNW during the audit period. Neither ICP was requested by the trader.

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

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

Aurora has a fully automated registry update process to ensure all information listed in this clause is provided to the registry. Registry information is updated each night.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were created for DUNW, and ready status, network (including the proposed trader), address, and pricing information was populated on the registry prior to initial electrical connection.

Audit outcome

Compliant

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

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

Aurora has a fully automated registry update process to ensure all information listed in this clause is provided to the registry. Registry information is updated each night.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were created for DUNW, and ready status, network (including the proposed trader), address, and pricing information was populated on the registry prior to initial electrical connection.

Audit outcome

Compliant

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

The livening reports provided by the contractors have the initial electrical connection date recorded on them. This date is entered into Gentrack which then writes this to the registry.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were created for DUNW, and they do not have initial electrical connection dates recorded although they have moved to active status and have metering installed. Aurora advised that they were missed due to human error.

ICP	IECD	Active date	Meter cert date
0000513444DE495	Missing expected to be 21 March 2022	25 March 2022	25 March 2022
0000511212DE854	Missing expected to be 30 November 2020	30 November 2020	30 November 2020

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 30-Nov-20 To: 20-Jan-23	<p>DUNW</p> <p>New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: None</p> <p>Controls: Weak</p> <p>Breach risk rating: 3</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are weak, because neither new ICP had an initial electrical connection date populated although Aurora has a process for populating initial electrical connection dates.</p> <p>The audit risk rating is low because there is no direct impact on submission. Retailers may use this information to check their active dates.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
These two ICPS have been followed up with Aurora. Aurora have updated the IECD dates for both ICPS		Cleared	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
We will discuss with Aurora what actions can be taken to resolve future discrepancies of this nature		30/04/2023	

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.

Audit observation

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

The new connection process creates the ICP at “ready”. Notification is sent to the proposed trader, the customer and electrician when the ICP has been approved and created. The trader is expected to notify Aurora if they reject the ICP, and the customer is notified of the rejection.

TRPG There were no new connections for TRPG during the audit period. A trader is recorded for each active ICP and no shared unmetered load is supplied.

DUNW Two new ICPs were created for DUNW, and the trader accepted responsibility by claiming the ICP on the registry prior to initial electrical connection. A trader is recorded for each active ICP and no shared unmetered load is supplied.

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.

Audit observation

Aurora’s new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

Compliance is recorded in the Aurora audit report.

The new connections process sends a notification to the proposed trader to confirm responsibility. The trader is recorded in the registry and must advise if they decline.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were created for DUNW, and the trader accepted responsibility by claiming the ICP on the registry prior to initial electrical connection. A trader is recorded for each active ICP.

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.

Audit observation

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

Aurora's new connection process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

The living reports provided by the contractors have the initial electrical connection date recorded on them. This date is entered into Gentrack which then writes this to the registry.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were created for DUNW. The meter certification date for both new connections matched the active status date and no temporary electrical connections were identified.

Audit outcome

Compliant

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

Code reference

Clause 10.30

Code related audit information

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

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

No new NSPs were created by Manawa 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 reviewed.

Audit commentary

No new NSPs were created by Manawa during the audit period. No temporary electrical connections were identified.

Audit outcome

Compliant

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

Code reference

Clause 1(1) Schedule 11.1

Code related audit information

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

xxxxxxxxxxccc where:

- xxxxxxxxxxxx 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

Aurora's ICP creation process was examined during their distributor audit. The registry list and event detail reports were reviewed to determine compliance.

Audit commentary

Aurora's audit report recorded compliance for the creation of ICP numbers.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two compliant new ICPs were created for DUNW.

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 registry lists were examined to confirm all active ICPs have a single loss category code.

Audit commentary

Each active and inactive TRPG and DUNW ICP has a single loss category, which clearly identifies the relevant loss factor.

Audit outcome

Compliant

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

Code reference

Clause 13 Schedule 11.1

Code related audit information

The ICP status of “new” must be managed by the distributor to indicate:

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

Audit observation

Aurora’s processes for ICPs at “new” status was examined during their distributor audit. The registry lists were reviewed to determine compliance.

Audit commentary

All ICPs are created at the “ready” status, and there are no TRPG or DUNW ICPs at “new” status.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

If an ICP has had the status of “New” or has had the status of “Ready” for 24 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

Aurora's processes for ICPs at "new" and "ready" status was examined during their distributor audit. The registry lists were reviewed to determine compliance.

Audit commentary

Aurora has reporting in place to identify ICPs at "new" and "ready" for longer than 24 months, and they contact the electrician and trader to confirm if the ICP is still required.

TRPG No ICPs are at "new" status.

ICP 0001187170WF770 has been at "ready" status for more than 24 months with Trustpower as the proposed trader. The status of the ICP was last checked with Trustpower on 1 October 2021.

Manawa believes residual load (SB) ICP 0001187170WF770 should be at "distributor" status, but "distributor" status is only expected to be used for embedded network gateway (LE) ICPs and shared unmetered load (SI) ICPs. If the ICP is expected to have any residual load for TWC2201 recorded against it, it should have "active" status.

I recommend that investigation is conducted to confirm the residual load ICP is required. If it is, Trustpower should be asked to update the ICP status to "active" from the correct connection date. If it is not required, the status should be moved to "decommissioned".

DUNW No ICPs are at "new" or "ready" status.

Description	Recommendation	Audited party comment	Remedial action
Status for ICP 0001187170WF770	Confirm whether the residual load ICP is required. If it is required, Trustpower should be asked to update the ICP status to "active" from the correct connection date. If it is not required, the status should be moved to "decommissioned".	ICP status will be moved to decommissioned	Identified

Audit outcome

Compliant

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

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

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

- The loss category code must be unique; and

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

Audit observation

The registry lists were reviewed to determine compliance.

Audit commentary

TRPG Three ICPs with generation capacity over 10 MW do not have unique loss factors recorded. The loss factor values are correct, and a technical non-compliance is recorded because the loss category codes are not unique as required by clause 7(6) Schedule 11.1.

ICP	Generation capacity	Distributor Loss Category	Loss factor consumption, generation	Loss category shared with
0000207212DE07E	114420	WPGHV	1,1	0000207213DEC3B which has generation capacity of zero.

SB ICP 0000207212DE07E and LE ICP 0000207213DEC3B are both connected to the same NSP, and Manawa believed it was acceptable to use the same loss factor code.

ICP	Generation capacity	Distributor Loss Category	Loss factor consumption, generation	Loss category shared with
0001187181WFB22	24500	TWFL2	1,1	0001190422WF679
0001190422WF679	24000	TWFL2	1,1	0001187181WFB22

ICPs 0001187181WFB22 and 0001190422WF679 are both situated in the same Windfarm and Manawa believed it was acceptable to use the same loss factor due to their close proximity.

DUNW No ICPs with generation capacity are supplied.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.15 With: Clause 7(6) Schedule 11.1 From: 01-May-08 To: 10-Jan-22	TRPG ICPs 0000207212DE07E, 0001187181WFB22 and 0001190422WF679 have generation capacity over 10 MW but do not have unique loss factor codes recorded. 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 this is a technical non-compliance with no impact. The audit risk rating is low because all loss factors for TRPG are 1.		
Actions taken to resolve the issue		Completion date	Remedial action status
The technical non-compliance will remain for the windfarm ICP's given the equivalent physical connection properties of the two connections. The technical non-compliance will remain for the Waipori ICP's as the Waipori Village gate ICP shares the same embedded network as the residual ICP		31/01/2023	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The loss factors of ICP's with generation greater than 10MW are carefully calculated & regularly reviewed. New loss codes are created where applicable		31/01/2023	

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 registry lists were reviewed to determine compliance.

Audit commentary

Aurora requires trader approval before an ICP is connected.

TRPG There were no new connections for TRPG during the audit period.

DUNW Two new ICPs were created for DUNW, and the trader accepted responsibility by claiming the ICP on the registry prior to initial electrical connection. A trader is recorded for each active ICP.

Audit outcome

Compliant

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

Code reference

Clause 10.30C and 10.31C

Code related audit information

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

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

Audit observation

Processes for disconnection were reviewed.

Audit commentary

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

Audit outcome

Compliant

3.18. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33C

Code related audit information

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

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

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

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

Audit observation

Processes for bridging were reviewed. I checked for any bridged meters.

Audit commentary

Aurora advised they do not bridge any meters, they advise the customer to contact the retailer. Aurora is not aware of any meters that have been bridged during the audit period.

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 3 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 8 business days after the change takes effect.

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

In the case of decommissioning an ICP, notification must be given by the later of 3 business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or 3 business days after the distributor has decommissioned the ICP.

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

Audit observation

Registry updates are completed by Aurora. The event detail reports were reviewed to determine compliance.

Audit commentary

When information recorded in the registry changes, the distributor should ensure that the registry is updated within three business days.

TRPG

No registry updates occurred during the audit period for TRPG.

DUNW

Update type	Updates	Late updates	Percentage on time	Average business days
Address	26	8	69.2%	2
Network	4	2	50.0%	164
Pricing	35	14	60.0%	10
Status	-	-	-	-

All of the late updates were checked and found to be corrections, and update content was correct. The late pricing and network updates were delayed by a pricing display issue in Gentrack. Aurora has raised Gentrack service request AELGS-12 to address this.

The previous audit found ICP 0000031712DE94F was decommissioned in 2018 but on 9 July 2019 another status event was sent to the registry for the same status and reason and with the same event

date. A recommendation was raised to investigate this, and Aurora confirmed that an update was requested by Trustpower as part of their reconciliation participant audit.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 15-Jan-21 To: 29-Mar-21	DUNW Eight late address updates. Two late network updates. 14 late pricing updates. 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 moderate because 34/65 registry updates were late and all late updates were corrections. The audit risk rating is low because the impact on settlement and participants is minor.		
Actions taken to resolve the issue		Completion date	Remedial action status
As identified by the auditor the late updates were caused by a system issue that has since been resolved		31/01/2023	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
No preventative actions required as issue resolved with system update		31/01/2023	

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 registry lists were reviewed to determine compliance.

Audit commentary

Aurora's controls to ensure new ICPs have the correct NSP are robust. The NSP is based on geographical location in GIS, and where NSP boundaries meet the NSP is determined by the transformer the ICP will be connected to. Validation is in place to ensure NSP accuracy.

All TRPG and DUNW ICPs have the correct NSP recorded.

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 examined.

Audit commentary

As recorded in Aurora's audit, Aurora does receive direct requests for ICP identifiers and these are provided immediately.

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

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

Audit observation

The registry lists were reviewed to determine compliance.

Audit commentary

Review of TRPG and DUNW's registry lists found that all ICPs have unique addresses with sufficient information to allow the ICPs to be readily located.

Audit outcome

Compliant

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 examined.

Audit commentary

Compliance is recorded in the Aurora audit report. For new connections, this clause is well understood, and the policy is to allow shared service mains, but individual fusing is required. A section in the “network connection inspection form” requires that fusing information be notified.

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 from metering information*
 - c) *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 registry lists were reviewed to determine compliance.

Audit commentary

- TRPG** Examination of the registry list confirmed that ICP information had been populated correctly.
- DUNW** Examination of the registry list confirmed that ICP information had been populated correctly except for two new ICPs which did not have initial electrical connection dates recorded.

ICP	IECD	Active date	Meter cert date
0000513444DE495	Missing expected to be 21 March 2022	25 March 2022	25 March 2022
0000511212DE854	Missing expected to be 30 November 2020	30 November 2020	30 November 2020

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.6 With: Clause 7(1) Schedule 11.1 From: 30-Nov-20 To: 20-Jan-23	New ICPs 0000513444DE495 and 0000511212DE854 are connected but do not have initial electrical connection dates recorded. 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 over data accuracy are strong overall because only two exceptions were identified. The audit risk rating is low because there is no direct impact on submission. Retailers may use this information to check their active dates.		
Actions taken to resolve the issue	Completion date	Remedial action status	
These two ICPS have been followed up with Aurora. Aurora have updated the IECD dates for both ICPS	Cleared	Investigating	
Preventative actions taken to ensure no further issues will occur	Completion date		
We will discuss with Aurora what actions can be taken to resolve future discrepancies of this nature	30/04/2023		

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 registry list and event detail reports were reviewed to determine compliance.

Audit commentary

Aurora normally adds the price code when ICPs are at the ready status.

TRPG	No new connections occurred during the audit period.
DUNW	Two new ICPs were created during the audit period and pricing information was populated before 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 lists were examined to determine compliance.

Audit commentary

No TRPG or DUNW ICPs have GPS coordinates populated.

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

The management and use of the “ready” status was examined. The registry lists were examined to determine compliance.

Audit commentary

Aurora creates ICPs at “ready”. Notification is sent to the proposed trader, customer, and electrician when the ICP has been approved and created. The trader is expected to notify Aurora if they reject the ICP, and the customer is notified.

TRPG ICP 0001187170WF770 has been at “ready” status for more than 24 months with Trustpower as the proposed trader. Trustpower moved the ICP to “inactive – new connection in progress” status from 3 March 2018 and then reversed the status back to ready on 25 September 2018.

Manawa believes residual load (SB) ICP 0001187170WF770 should be at “distributor” status, but “distributor” status is only expected to be used for embedded network gateway (LE) ICPs and shared unmetered load (SI) ICPs. If the ICP is expected to have any residual load for TWC2201 recorded against it, it should have “active” status.

In **section 3.14** I have recommended that investigation is conducted to confirm the residual load ICP is required. If it is, Trustpower should be asked to update the ICP status to “active” from the correct connection date. If it is not required, the status should be moved to “decommissioned”. Compliance is recorded in this section as until investigation is complete, the use of “ready” status is reasonable.

DUNW No ICPs are at “ready” status

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

The management and use of the “distributor” status was examined. The registry lists were examined to determine compliance.

Audit commentary

TRPG TRPG has embedded network gateway (LE) ICP 0000207213DEC3B correctly at distributor status. There is no shared unmetered load.

DUNW There are no ICPs at distributor status and no ICPs with shared unmetered load.

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 management and use of the “distributor” status was examined. The registry list and event detail reports were examined to determine compliance.

Audit commentary

Aurora’s decommissioning processes are well documented. Where the trader has updated the status to “ready for decommissioning” Aurora will actively manage these ICPs to ensure they obtain a decommissioning report. Aurora is currently reviewing the decommissioning process to identify areas of improvement.

TRPG There are no ICPs at decommissioned or ready for decommissioning status.

DUNW There are no ICPs at ready for decommissioning status, and no ICPs were decommissioned during the audit period.

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

Manawa has not created any new price category codes or modified any existing price category codes for TRPG or DUNW 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

The loss category code table on the registry was examined.

Audit commentary

Manawa has not created any new loss category codes for TRPG or DUNW 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 2 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

Manawa did not modify any loss factor codes for TRPG during the audit period.

The following loss factor changes were completed on time for DUNW, and there was only one loss factor value per month.

Ntwk	Loss Code	Loss Factor Consumption	Loss Factor Generation	Start Date	End Date	Updated
DUNW	WPVLV	1.2	1	1 April 2020	31 March 2021	21 January 2020 16:16
DUNW	WPVLV	1.2937	1	1 April 2021	31 January 2023	11 February 2021 14:39
DUNW	WPVLV	1.2063	1	1 February 2023		11 January 2023 07:59

Aurora indicated that the loss factor for WPVLV changed to 1.2063 from 1 April 2022, but this was not updated on the loss factor table until the missed update was identified during the audit and changed from the beginning of the next month.

Audit outcome

Non-compliant

Non-compliance	Description	
Audit Ref: 5.2 With: Clause 22 Schedule 11.1 From: 01-Feb-22 To: 01-Apr-22	DUNW WPVLV was not updated to the new loss factor code value of 1.2063 from 1 April 2022. 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 strong, the update was accidentally missed when processing loss factor updates and it appears to be an isolated issue. The impact is low, based on the loss factor difference and that the missed update was added as soon as possible once it was identified during the audit.	
Actions taken to resolve the issue	Completion date	Remedial action status
The loss code entry was added to the loss factor table at the time it was discovered during the audit	Cleared	Investigating
Preventative actions taken to ensure no further issues will occur	Completion date	
The controls have been identified as strong and the issues classed as an isolated event. However we intend to discuss with Aurora whether further actions are appropriate to ensure future omissions of this nature can be avoided.	30/04/2023	

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 2 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 2 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.

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

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

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

- *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 on the registry was examined.

Audit commentary

Manawa has not created or decommissioned any NSPs 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 2 local networks. In all other cases, the request must be made at least 1 month before the NSP is electrically connected or the ICP is transferred.

Audit observation

The NSP table on the registry was examined.

Audit commentary

Manawa has not created or transferred any NSPs 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 on the registry was examined.

Audit commentary

Manawa has not created any NSPs or balancing areas 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 give notice to the reconciliation manager at least 1 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

Manawa has not created or transferred any NSPs 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 3 business days after the change takes effect.

Audit observation

The NSP table on the registry was examined.

Audit commentary

Manawa has not changed any balancing areas 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 1 month before the transfer.

Audit observation

The NSP table on the registry was examined.

Audit commentary

No ICPs became NSPs during the audit period.

Audit commentary

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 3 business days before the transfer takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

Manawa 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 network supply point table was examined.

Audit commentary

All points of connection have metering installations with current certification. There have been no meter certification changes during the audit period.

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

Manawa 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

Manawa 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 advise the reconciliation manager and the gaining MEP.

Audit observation

The NSP supply point table was examined.

Audit commentary

There have been no MEP changes during the audit period.

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

Manawa 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

Manawa 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

The registry lists were examined to determine compliance.

Audit commentary

There are no ICPs with shared unmetered load connected for TRPG or DUNW.

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

The registry lists were examined to determine compliance.

Audit commentary

There have been no changes to shared unmetered load details for TRPG or DUNW.

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

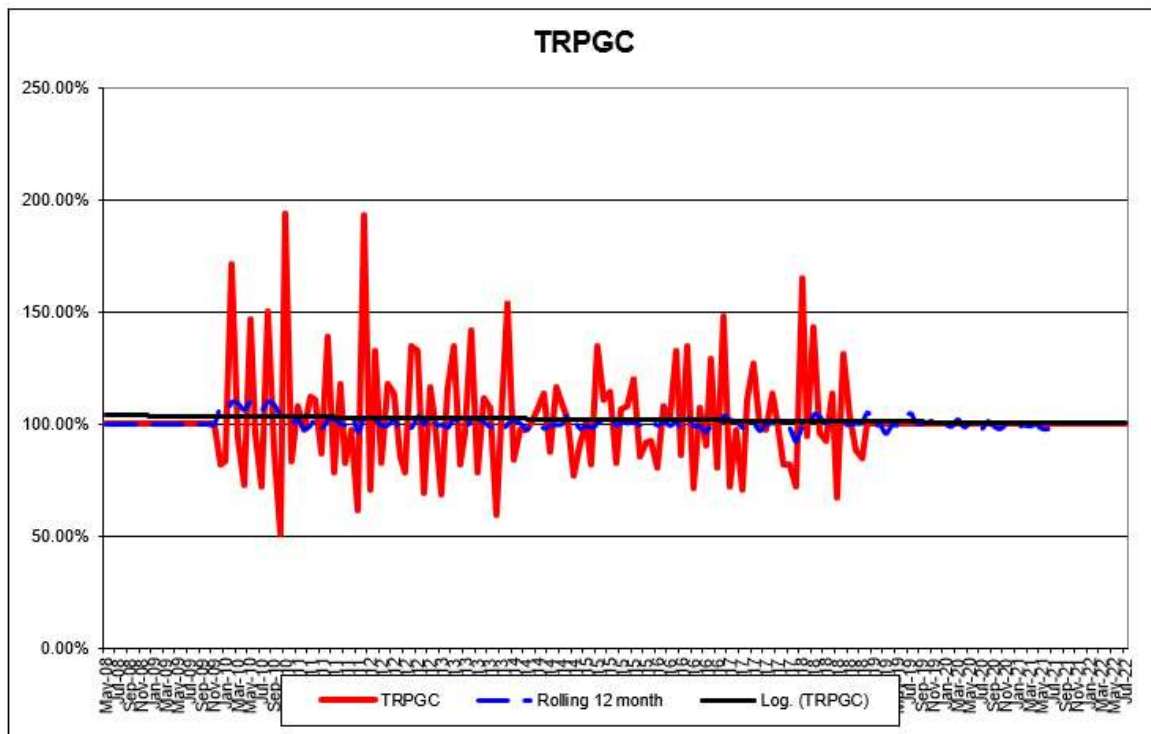
The “Guidelines on the calculation and the use of loss factors for reconciliation purposes” was published on 26 June 2018. I have assessed Manawa’s process and compliance against the guideline’s recommended thresholds.

Audit commentary

TRPG

Manawa did not modify any loss factor codes for TRPG during the audit period. All three codes are set to 1, and are compliant. I reviewed the loss factors for SB ICPs and confirmed that they were 1 for TRPG.

Losses for TRPG are shown on the chart below.



DUNW

DUNW has one loss factor code, WPVLV. The changes below were made during the audit period, and there was only one loss factor value per month.

Ntwk	Loss Code	Loss Factor Consumption	Loss Factor Generation	Start Date	End Date	Updated
DUNW	WPVLV	1.2	1	1 April 2020	31 March 2021	21 January 2020 16:16
DUNW	WPVLV	1.2937	1	1 April 2021	31 March 2022	11 February 2021 14:39
DUNW	WPVLV	1.2063	1	Expected start date 1 April 2022		Not updated
				Applied start date 1 February 2023		11 January 2023 07:59

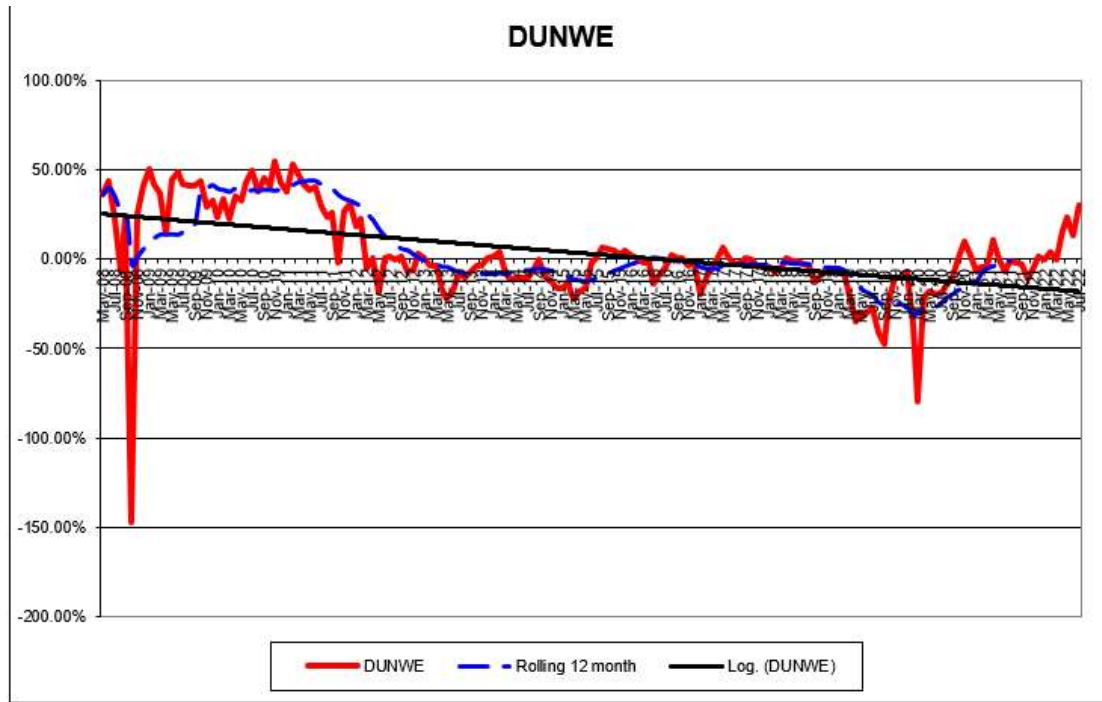
The loss factor of 1.2 from 1 April 2020 was based on research of transformer losses for a quantity of 12 transformers and took into account an unmetered connection on the network.

The loss factor of 1.2937 from 1 April 2021 was based on the actual loss ratio for the year ended 31 March 2020, as recommended in the previous audit. The loss factor is high because of the large transformer capacity relative to the actual load.

The loss factor decreased to 1.2063 from 1 April 2022, based on the actual loss ratio for the last two years. This change was not recorded on the loss factor table until 11 January 2023 (effective from 1 February 2023) when the missed update was identified during the audit. The late update is recorded as non-compliance in **section 5.2**.

There are no SB ICPs for DUNW.

Losses for DUNW are shown on the chart below.



Audit outcome

Compliant

CONCLUSION

Aurora performs all of the relevant functions for Manawa with the exception of network supply point table maintenance, which is carried out by Manawa. Aurora uses the same systems and processes for Manawa and ICPs on their own Aurora network, and their processes are compliant.

TRPG	<p>There were no changes to registry information during the audit period, and no inaccurate ICP data was identified.</p> <p>There was a technical non-compliance for not having unique loss categories for each ICP with generation capacity over 10 MW. The non-compliance has no impact, because all of the affected ICPs should have the same loss factor value.</p>
DUNW	<p>There were a small number of registry data updates, two new connections, and a loss factor update.</p> <p>The loss factor remains high because of the large transformer capacity relative to the actual load, and is now based on the actual loss ratio for the past two years.</p> <p>Registry data was found to be accurate except for two new ICPs which did not have initial electrical connection dates populated.</p> <p>There were some late registry updates caused by backdated corrections, and a loss factor change was entered late.</p>

The audit risk rating is ten, and the audit frequency table indicates that the next audit is due in 12 months. I recommend that the next audit is due in at least 18 months, after considering:

- Manawa's comments,
- that four of the non-compliances (six points) relate to initial electrical connection dates which are missing for two ICPs, and
- the impact of the non-compliances.

PARTICIPANT RESPONSE

We are happy that the processes and procedures are robust for both Manawa and Aurora. The small number of discrepancies will be discussed between Manawa & Aurora in the coming months to confirm there are no systematic issues that could allow the same (and other) discrepancies to occur again in the future.