

**ELECTRICITY INDUSTRY PARTICIPATION CODE  
DISTRIBUTOR AUDIT REPORT**

For

**NETWORK TASMAN**

Prepared by: Rebecca Elliot

Date audit commenced: 4 June 2019

Date audit report completed: 11 September 2019

Audit report due date: 15-Sep-19

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## EXECUTIVE SUMMARY

This Distributor audit was performed at the request of **Network Tasman Ltd (Network Tasman)** to encompass the Electricity Industry Participation Code requirement for an audit as required by clause 11.10 of part 11. The audit was carried out at Network Tasman's premises in Nelson on July 16<sup>th</sup>, 2019.

The audit was conducted in accordance with the Guideline for Distributor Audits version 7.2, which was produced by the Electricity Authority.

Network Tasman were one of the first Distributor's to be awarded a 24-month audit period due to the high level of compliance found and the robust controls in place. This is their second audit since the new audit regime came into effect in June 2017. I have found a similar high level of compliance and robust controls in place.

I have raised one issue in relation to the calculation of loss factors. Network Tasman and Nelson Electricity's loss factor calculations both appear to be reasonable but the UFE graphs indicate that losses for both networks are outside the expected +/- 1% threshold. This variance appears to have started when Nelson Electricity moved to a grid connection. Network Tasman have been in communication with the Reconciliation Manager in December 2018 and he indicated that this was going to be investigated but the person has since left and there has been no further communication. This is discussed in **section 8.1**.

This audit found two minor non-compliances and makes one recommendation. This excellent result reflects Wendy's continued hard work and diligence in her role. The indicative audit frequency table indicates the next audit should be in 24 months and I agree with this recommendation.

## AUDIT SUMMARY

### NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Participants may request distributors to create ICPs	3.2	11.5(3)	One ICP not created within three days of request.	Strong	Low	1	Identified
Changes to registry information	4.1	8 of Schedule 11.1	A small number of registry event updates backdated greater than three days.	Strong	Low	1	Identified
Future Risk Rating						2	
Indicative Next Audit Frequency						24 months	

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	Remedial action
Distributors to provide ICP information	4.6	I recommend that the EIEP1 file is checked to identify distributed generation.	Two new queries set up to assist with this process

### ISSUES

Subject	Section	Issue	Description
Loss factors	8.1	UFE losses appear to be greater than +/- 1%	Investigation required into the UFE calculations used by the Reconciliation Manager system.

## 1. ADMINISTRATIVE

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

#### Code reference

*Section 11 of Electricity Industry Act 2010.*

#### Code related audit information

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

#### Audit observation

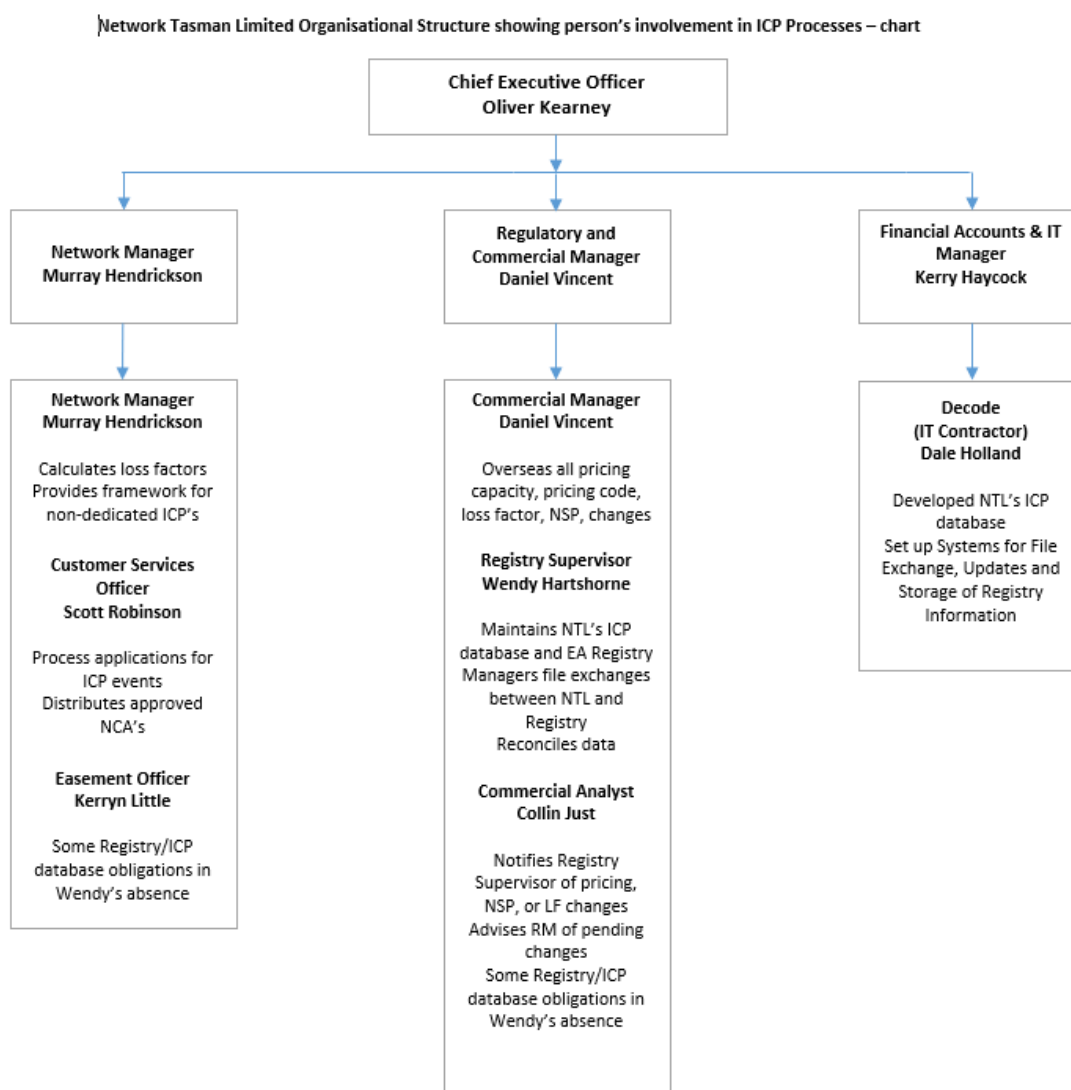
The Authority website was checked to determine whether there are code exemptions in place

#### Audit commentary

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

### 1.2. Structure of Organisation

Network Tasman provided a copy of the relevant part of the organisation chart:



### 1.3. Persons involved in this audit

Auditor:

**Rebecca Elliot**

**Veritek Limited**

**Electricity Authority Approved Auditor**

Network Tasman personnel assisting in this audit were:

Name	Title
Collin Just	Commercial Analyst
Wendy Hartshorne	Revenue Protection Officer/Registry Analyst

### 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

Network Tasman approves field contractors to conduct connection related activities. I checked Network Tasman's approach to the management of contractors.

#### Audit commentary

Network Tasman has provided the list below of sub-contractors authorised to perform livening activities on their network.

**Network Tasman Limited Approved Independent Contractors/Agents  
Involved in the processes to be included in the Distributor audit**

**Installing Contractors**

Installing Contractors who have been through the NTL approval process to make connections/alterations to ICP's connected to the Network Tasman Limited distribution system i.e. they have an Authorisation Holders Certificate

Vircom EMS – 66 Oxford Street Richmond - 021 527 912  
Delta Utility Services – 24 Main Road Hope - 03 544 7440  
Powertech Nelson – 17 Poutama Street Richmond - 03 5410580  
Power Services – Seaton Valley Road Mapua – 021 756 535  
W J Ashton Services Limited – 144 Barnett Ave Richmond – 021 159 4223

## 1.5. Supplier list

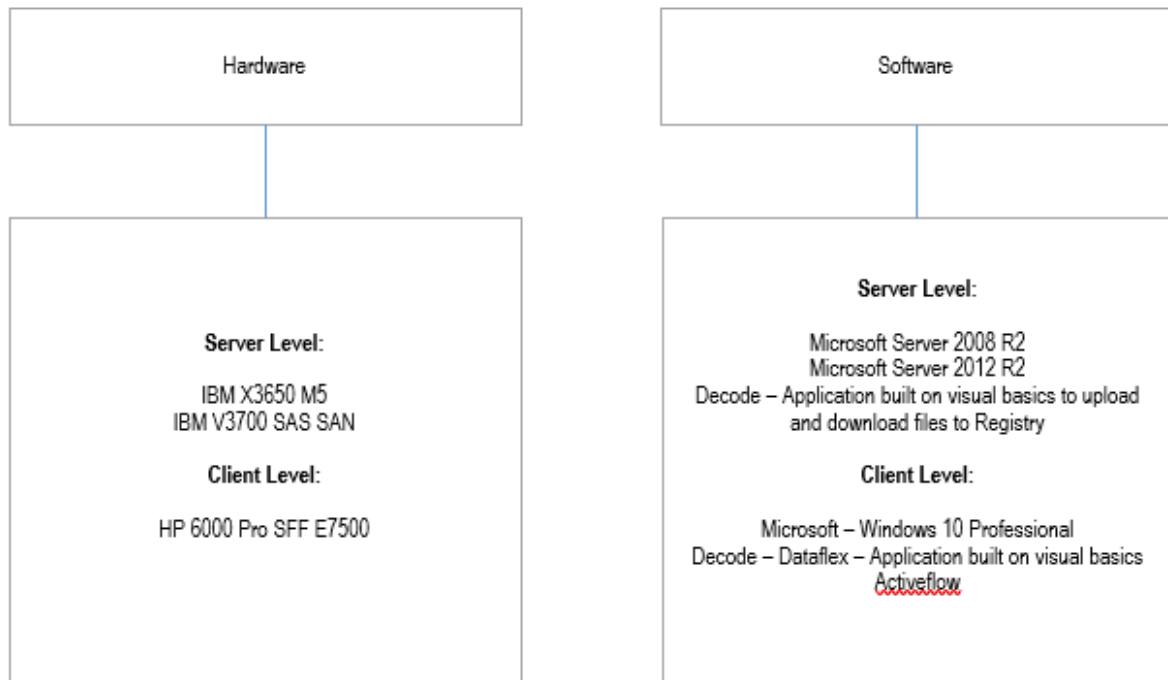
Network Tasman has provided the list in **section 1.4** of sub-contractors authorised to perform livening activities on their network.

## 1.6. Hardware and Software

Network Tasman provided the following diagram that details hardware and software used in the processes to be audited.



**Network Tasman Limited – Hardware and Software**  
**Manufacturers of hardware and software that assist or are used in the process to be audited**



**System Back-Up Arrangements**

Network Tasman perform log shipping from NTASSQL3 to NTASSQL4 every 15 mins.  
 Network Tasman keep transactional logs for 48 hrs on NTASSQL3 and NTASSQL4.  
 Network Tasman perform nightly offsite backup of all SQL databases and transactional logs to disk at CCL Nelson Datacenter, the backups are copied to CCL Christchurch Datacenter and then off loaded to tape.  
 Network Tasman perform nightly offsite backup of all servers to disk at CCL Nelson Datacenter, the backups are copied to CCL Christchurch Datacenter and then off loaded to tape

## 1.7. Breaches or Breach Allegations

Network Tasman has not had any breach allegations recorded by the Electricity Authority during the audit period.

## 1.8. ICP and NSP Data

The NSP mapping table was examined:

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of active ICPs
TASM	FND0112	Founders	STK0331	TASM	BALANC1TASMG	I	20/09/2008	0
TASM	HVN0331	HAVEN RD	STK0331	TASM	BALANC1TASMG	I	1/02/2014	0
TASM	KIK0111	KIKIWA			BALANC1TASMG	G	1/05/2008	1,106
TASM	MCH0111	MURCHISON			MCH0111TASMG	G	1/07/2017	859
TASM	STK0331	STOKE			BALANC1TASMG	G	1/05/2008	27,104
TASM	STK0661	STOKE			BALANC1TASMG	G	3/12/2014	11,078

The list file as at 31/5/19 was examined and found:

Status	Number of ICPs 2019	Number of ICPs 2017	Number of ICPs 2016
New (999,0)	0	1	0
Ready (0,0)	59	35	43
Active (2,0)	40,147	39,093	38,573
Distributor (888,0)	8	8	8
Inactive – new connection in progress (1,12)	30	36	27
Inactive – electrically disconnected vacant property (1,4)	286	307	293
Inactive – electrically disconnected remotely by AMI meter (1,7)	45	27	0
Inactive – electrically disconnected at pole fuse (1,8)	7	2	0
Inactive – electrically disconnected due to meter disconnected (1,9)	5	4	0
Inactive – electrically disconnected at meter box fuse (1,10)	2	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	0	0
Inactive – electrically disconnected ready for decommissioning (1,6)	1	1	1
Inactive – reconciled elsewhere (1,5)	0	0	0
Decommissioned (3)	5,851	5,704	5,625

### 1.9. Authorisation Received

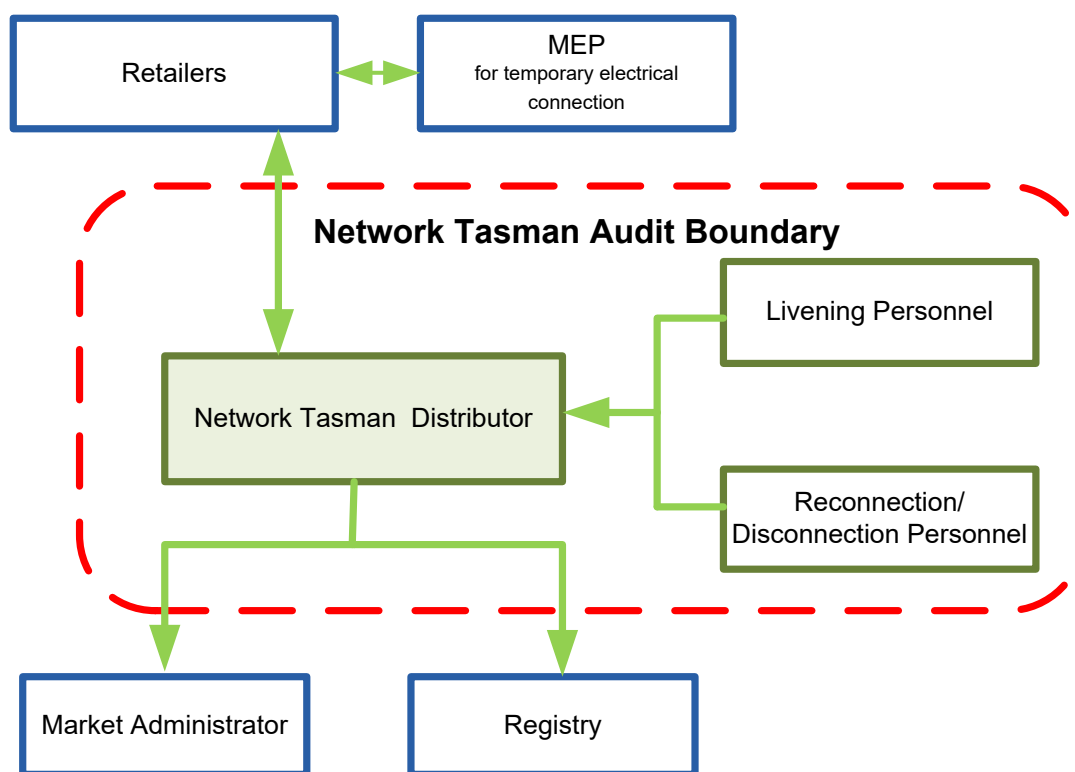
Network Tasman provided a letter of authorisation to Veritek, permitting the collection of data from other parties for matters directly related to the audit.

### 1.10. Scope of Audit

This Distributor audit was performed at the request of **Network Tasman Ltd (Network Tasman)** to encompass the Electricity Industry Participation Code requirement for an audit as required by clause 11.10 of part 11. The audit was carried out at Network Tasman's premises in Nelson on July 16<sup>th</sup>, 2019.

The audit was conducted in accordance with the Guideline for Distributor Audits version 7.2, which was produced by the Electricity Authority.

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



All activities covered by this audit are conducted at Network Tasman's head office in Nelson.

### 1.11. Summary of previous audit

Network Tasman provided a copy of their previous audit report, conducted by Rebecca Elliot of Veritek Limited in August 2017. This found three non-compliances and made no recommendations. The current status of these has been updated below:

**Table of Non-Compliance**

Subject	Section	Clause	Non-compliance	Status
Timeliness of provision of Initial electrical connection date	3.5	7(2A) of Schedule 11.1	The event date populated to the registry for IED updates is not the IED date.	Cleared
Changes to registry information	4.1	8 of Schedule 11.1	Registry event updates backdated greater than three days.	Still existing
Provide information to the registry	4.6	7 (1) (m)&(p) of Schedule 11.1	1 ICP with missing initial energisation date. 1 ICP with incorrect UML details.	Cleared

## 2. OPERATIONAL INFRASTRUCTURE

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

#### Code reference

*Clause 11.2(1) and 10.6(1)*

#### Code related audit information

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

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

#### Audit observation

I walked through the process to ensure that registry information is complete, accurate and not misleading or deceptive, including viewing reports used to resolve discrepancies.

The registry list file as at 31/05/19 was examined to confirm compliance.

#### Audit commentary

Network Tasman has processes in place to ensure that information is complete and accurate and is not misleading or deceptive. Additional validations are added as required. Examination of the list file found no examples of misleading or deceptive information. Network Tasman makes every effort to ensure data is complete and accurate.

#### Audit outcome

Compliant

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

#### Code reference

*Clause 11.2(2) and 10.6(2)*

#### Code related audit information

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

#### Audit observation

Network Tasman's data management processes were examined. The registry list file as at 06/03/19 was examined to confirm compliance.

#### Audit commentary

Network Tasman have robust processes and procedures in place to ensure they provide correct and accurate information. A comprehensive daily discrepancy report checks 54 potential discrepancies. The list of the discrepancies types were provided. Any discrepancies found are investigated and updated as required.

#### 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**.

A diverse characteristics sample of 30 new connection applications of the 1,112 created since 1/07/2017 were checked from the point of application through to when the ICPs were created. The sample included ICPs with:

- various meter categories (including category 3 and above);
- various proposed traders;
- various price categories;
- with and without distributed generation; and
- connected to different NSPs.

There were no new connections with unmetered load connected during the audit period.

##### Audit commentary

Network Tasman creates ICPs as required by clause 1 of schedule 11.1. The sample checked confirmed that they were created compliantly.

The distributor is responsible for creating the ICP for the point of connection for an embedded network to its parent network. There have been no new embedded networks created 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

The new connection process was examined in detail. A diverse characteristics sample of 26 new connection applications of the 1,112 created since 01/07/2017 were checked to determine whether the ICPs had been created within three business days of a request by a trader.

### Audit commentary

ICP requests are received directly from customers, or their agents via the submission of a Network Connection Application Form (NCA). If engineering work is not required, the ICP is approved immediately and the ICP is created. If engineering work is required, the applicant is notified and the ICP is created at the completion of this work.

Network Tasman have reporting in place to monitor this. The sample checked found all but one was created within three days. ICP 0000055489NT320 was created more than three days from the requested date due to a lack of resource.

### Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 With: clause 11.5(3)  From: 23-Apr-18 To: 03-May-18	One ICP not created within three days of request.  Potential impact: Low  Actual impact: Low  Audit history: None  Controls: Strong  Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong as Network Tasman have reporting in place providing good visibility of this.  The audit risk rating is low as the majority of ICPs are created within the required timeframe.		
Actions taken to resolve the issue		Completion date	Remedial action status
NTL have recently trained another staff member to cover the ICP creation process. This should reduce the risk of late creation when key staff are on planned or unplanned leave.		11/09/19	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
NTL cannot control multiple staff being away on sick leave at the same time another staff member is on annual leave. Therefore we can only make best efforts to ensure no further issues will occur.		11/09/19	

3.3.

### 3.4. 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

A diverse characteristics sample of 26 new connection applications of the created since 01/07/2017 were checked from the point of application through to when the ICP was created, to confirm the process and controls worked in practice.

#### Audit commentary

The process for updating the registry is automated for all fields. 1,112 ICPs were created during the audit period. Validation occurs within the database to ensure mandatory fields are populated. All had the correct information populated as required by this clause.

#### Audit outcome

Compliant

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

#### Code reference

Clause 7(2) of Schedule 11.1

#### Code related audit information

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

#### Audit observation

The registry list for 31/05/19 and event detail report for 01/07/17 to 31/05/19 were examined to determine the timeliness of the provision of ICP information for new connections.

#### Audit commentary

I confirmed that the registry was updated prior to electrical connection for all ICPs created during the audit period. Registry updates occur every 15 minutes.

#### Audit outcome

Compliant



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

#### Code reference

*Clause 7(2A) of Schedule 11.1*

#### Code related audit information

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

#### Audit observation

The registry list for 31/05/19 and event detail report for 01/07/17 to 31/05/19 were examined to determine the timeliness and accuracy of initial electrical connection dates for the 1,096 completed new connections.

#### Audit commentary

In the last audit I noted that Network Tasman's system was automatically applying the same effective date as the update date for the initial electrical connection dates. An additional field has been added to the database that ensures that the correct effective date can be entered, and this then updates to the registry.

1,092 (99.7%) of the 1,096 ICPS were updated with the initial electrical connection date within the required timeframe. The four late events were examined and found all had been populated within ten business days in the first instance and there was a subsequent update to correct or repopulate the initial electrical connection date.

#### Audit outcome

Compliant

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

#### Code reference

*Clause 11.17*

#### Code related audit information

*A distributor must, when connecting an ICP that is not an NSP, follow the connection process set out in Clause 10.31.*

*The distributor must not connect an ICP (except for an ICP across which unmetered load is shared) unless a trader is recorded in the registry as accepting responsibility for the ICP.*

*In respect of ICPs across which unmetered load is shared, the distributor must not connect an ICP unless a trader is recorded in the registry as accepting responsibility for the shared unmetered load, and all traders that are responsible for an ICP on the shared unmetered load have been advised.*

#### Audit observation

The new connection process was examined in **section 3.2**.

The registry list for 31/05/19 and event detail report for 01/07/17 to 31/05/19 were examined to determine compliance. There are no ICPs with shared unmetered load on Network Tasman.

### Audit commentary

Contractors are engaged by traders, who are also approved by Network Tasman, to conduct connection and electrical connection. The new connections process includes a “trader responsibility” step. Some traders provide an “acceptance” email back to Network Tasman which is passed on to the livening agent. Other traders have a blanket agreement in place with Network Tasman and they provide a service request directly to the livening agent.

For all ICPs examined electrical connection occurred after acceptance by a trader. Examination of the event detail report confirmed all ICPs were created at “Ready” on the registry within three business days.

### Audit outcome

Compliant

## 3.8. 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 in **section 3.2**.

A diverse characteristics sample of 26 new connection applications of the 1,112 created since 1/07/17 were checked to determine if the ICPs were connected at the request of the trader.

The registry list as at 31/5/19 was reviewed to confirm that all active ICPs had a trader recorded.

### Audit commentary

Network Tasman’s processes are robust in relation to this clause as an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. The list file confirmed that all ICPs at the “Ready” status had a trader nominated.

### Audit outcome

Compliant

### 3.9. 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 registry list for 31/05/19 and event detail report for 01/07/17 to 31/05/19 were examined to determine compliance.

#### Audit commentary

The majority of new connections are permanent connections. Analysis found no temporarily electrically connected sites that did not have trader permission as required by this clause.

#### Audit outcome

Compliant

### 3.10. 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 Network Tasman during the audit period.

### Audit outcome

Compliant

### 3.11. 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 Network Tasman during the audit period.

### Audit outcome

Compliant

### 3.12. Definition of ICP identifier (Clause 1(1) Schedule 11.1)

#### Code reference

*Clause 1(1) Schedule 11.1*

#### Code related audit information

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

*xxxxxxxxxxccc where:*

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

#### Audit observation

The process for the creation of ICPs was examined.

#### Audit commentary

The process for the creation of ICPs was examined, and all ICPs are created in the appropriate format.

### Audit outcome

Compliant

### 3.13. 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 as at 31/05/19 was examined to confirm all active ICPs have a single loss category code.

#### Audit commentary

Each active ICP only has a single loss category, which clearly identifies the relevant loss factor.

#### Audit outcome

Compliant

### 3.14. 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 new connection process was examined. The list and event detail files were examined in relation to the use of the “New” status.

#### Audit commentary

A small number of ICPs are created at “New” and the status is changed to “Ready” once a trader has accepted responsibility for the ICP. Most ICPs are created at “Ready” where the traders have given “blanket” approval that they will take responsibility for any ICP where they are nominated as the proposed trader. There were no ICPs at the “new” status in the list file.

#### Audit outcome

Compliant

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

#### Code reference

Clause 15 Schedule 11.1

#### Code related audit information

*If an ICP has had the status of “New” or has had the status of “Ready” for 24 months or more:*

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

#### Audit observation

The process to monitor ICPs at “new” and “ready” status was reviewed. The registry list for 31/05/19 and event detail report for 01/07/17 to 31/05/19 were examined to determine compliance.

#### Audit commentary

Network Tasman monitors a report of ICPs at the “New” and “Ready” status. Any record on this report that is older than approximately six months is investigated with the relevant contractor or customer. Some examples on the report were examined, and in all cases, Network Tasman could demonstrate knowledge of the reasons the ICPs were still at these statuses. There are no ICPs at “New” or “Ready” for more than 24 months.

#### Audit outcome

Compliant

### 3.16. 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 registry list as at 31/05/19 was examined to determine compliance.

#### Audit commentary

The Cobb generation station has a capacity greater than 10MW and it has a unique loss category code as required by this clause.

#### Audit outcome

Compliant

### 3.17. Electrical connection of a point of connection (Clause 10.33A)

#### **Code reference**

*Clause 10.33A(4)*

#### **Code related audit information**

*No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant.*

#### **Audit observation**

Sub-clause (4) states that no participant may electrically connect a point of connection without the permission of the Reconciliation Participant. The electrical connection of streetlight circuits which are a point of connection was examined.

#### **Audit commentary**

Network Tasman have a blanket agreement with both the traders who manage DUML on the Tasman network. All load changes are updated in the registry for the correct event date.

#### **Audit outcome**

Compliant

## 4. MAINTENANCE OF REGISTRY INFORMATION

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

#### Code reference

*Clause 8 Schedule 11.1*

#### Code related audit information

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

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

*In those cases, notification must be given no later than 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 13<sup>th</sup> business day and be backdated to the date the change took effect.*

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

#### Audit observation

The management of registry updates was reviewed.

The registry list and event detail report for 01/07/17 to 31/05/19 were reviewed to determine compliance. A diverse sample of ten (or all if there were less than ten examples) of backdated events by event type were reviewed to determine the reasons for the late updates.

The management of NSP changes was examined.

#### Audit commentary

Network Tasman update the ICP in the database and these changes flow to the registry. Registry updates occur every 15 minutes.

The event detail report was examined to identify backdated event updates.

#### Address events

877 address updates were made. All were updated within three business days of the event.



### Network events

There were 2,726 network events that did not relate to the initial population of trader and initial electrical connection dates for new connections (which are discussed separately in **sections 3.4** and **3.5**). 2,705 (99%) of these were updated within three business days. The remaining 21 ICPs were updated late. These were examined and found:

- six were DUMML updates that were provided late by the contractor, Network Tasman has reminded the contractor of their timeframe obligations;
- five were due to unauthorised distributed generation connections, Network Tasman proactively chased these to get the required paperwork to confirm what was installed and the registry was updated as soon as possible;
- five were late due to a lack of resource;
- three were due to staff training issues updating DUMML changes for which additional training has since been provided;
- late notification for installation of distributed generation by the contractor for ICP 0000050572NT3C7; and
- ICP 0000052210NT0F0 was backdated to remove an incorrectly populated initial electrical connection date.

### Pricing events

There were 37,109 pricing updates were identified. 18 of these were backdated more than three business days. These were examined and found:

- 11 events were due to staff training issues (these link to the DUMML updates detailed in the late network events above for which additional training has since been provided);
- three events were late due to a lack of resource;
- two events were due to corrections; and
- two were due to late notification from a contractor of an upgrade.

### Status events

The decommissioning process is discussed in **section 4.11**. The code changed on 1 November 2018 for the decommissioning of ICPs for networks. The network is required to update the ICP to decommissioned within three days of the event, or the date that the trader changes the status to “Inactive - ready to decommission”, whichever is later. I have assessed the activity in relationship to this in accordance of the code effective at the time the event occurred.

131 status updates to decommissioned were identified. 96 of these occurred prior to the code change. 59(62%) of these were late. I examined a sample of five of these and found they were updated late due to the trader updating the registry late.

35 of these have occurred since the code changed. Two (9%) of these were updated more than three days after the trader changed the status to “disconnected - ready to decommission. I checked both of these and found one was missed due to human error and the other was delayed due to lack of resource.

### Change of NSP

The process of NSP changes was examined. There were no NSP changes identified for the audit period.

The backdating of events to the registry is recorded as non-compliance.

### Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.1</p> <p>With: clause 8 schedule 11.1</p> <p>From: 01-Jul-17</p> <p>To: 31-May-19</p>	<p>A small number of registry event updates backdated greater than three days.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Three times</p> <p>Controls: Strong</p> <p>Breach risk rating: 1</p>		
Audit risk rating	Rationale for audit risk rating		
<b>Low</b>	<p>The controls are rated as strong as Network Tasman proactively work with contractors and staff to update events within the required timeframe.</p> <p>The audit risk rating is low as the volume of backdated is very small in comparison to the volume of changes made.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>NTL continue to remind contractors of the requirements to return complete and accurate information in a timely manner in order for NTL to meet the timeframes of the Code. NTL suffered the sudden loss of a staff member during the audit period. This accounted for lack of resource at times, and a new staff member having to be trained. An Electricity Participant (retailer) blatantly ignored the required process for installing and connecting DG systems to NTLs network. NTL did everything they could to assist this retailer with the correct process. NTL enforced the shutoff of the systems when found. We understand this retailer has now exited the retail market.</p>		11/09/19	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>NTL continue to press upon contractors the requirements to return complete and accurate information in a timely manner in order for NTL to meet the timeframes of the Code. On-going training is taking place. NTL continue to assist/advise DG installers on the correct application/installation process.</p>		11/09/19	

#### 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 list for 31/05/19 was reviewed to determine compliance.

##### **Audit commentary**

There is no uncertainty regarding NSP and ICP relationships. The GIS is used during the creation of all new connections to ensure the correct NSP is notified. The analysis confirmed that all ICPs were connected to the correct NSP.

##### **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**

Network Tasman 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 process to determine correct and unique addresses was examined. The registry list for 06/03/19 was reviewed to determine compliance.

##### Audit commentary

The new connections process includes a step where the address is checked for duplication. The “address property name” field on the registry is actively used as an additional measure to ensure compliance with this clause.

Analysis confirmed that all ICPs have street numbers, lot numbers, or in absence of a number, the property name field has additional information to make the ICP easily identified/located. There were no duplicates.

##### 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 discussed.

##### Audit commentary

All new connections require an individual service main for each ICP to be run to the boundary of the property and Network Tasman provides isolation. “As built” plans are reviewed for all new ICPs which provides visibility of this issue. There are some existing ICPs with “shared mains” and these are identified with tags at the isolation point. When any changes occur at these ICPs with shared mains Network Tasman attempts to deal with any problems by offering assistance where it is required.

All ICPs have a “Network Connection Point” (NCP) number, which is printed onto a label that is physically attached to the isolation point. The NCP number is a subset of the ICP identifier. This approach is an excellent way of ensuring the correct identification of ICPs.

Contractors have access to GIS information so there is a low risk of inadvertent disconnection.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 7(1) Schedule 11.1*

##### Code related audit information

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

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
  - a) *the unique loss category code assigned to the ICP*
  - b) *the ICP identifier of the ICP*
  - c) *the NSP identifier of the NSP to which the ICP is connected*
  - d) *the plant name of the embedded generating station*
- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*
- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
  - a) *a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
  - b) *a blank chargeable capacity if the capacity value can be determined for a billing period from metering information collected for that billing period*
  - c) *if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
    - (i) *no capacity value recorded in the registry field for the chargeable capacity; and*
    - (ii) *either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
  - d) *if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
    - (i) *the annual capacity value recorded in the registry field for the chargeable capacity; and*
    - (ii) *either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
  - e) *the actual chargeable capacity of the ICP in any other case*

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

#### **Audit observation**

The management of registry information was reviewed. The registry list as at 31/05/19 was reviewed to determine compliance. A typical sample of data discrepancies were checked.

Registry data validation processes are discussed in **section 2.1**.

#### **Audit commentary**

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

##### Distributed Generation

Network Tasman has a well-managed process for managing the approval and connection of distributed generation. If unauthorised connections are found, Network Tasman takes immediate action, which can include disconnection for safety reasons. The volume of these installations continues to increase.

A check of the PR255 against the list file identified 23 ICPs where the metering indicates there is an injection channel, but Network Tasman has no distributed generation recorded. These were analysed and found:

- 15 ICPs with one trader appear to have been connected without following the correct process. A check of the EIEP1 file confirmed that there is generation on these sites. The required information since been provided for four of these installations and the registry has been updated accordingly. The late notification from the trader causes Network Tasman to be non-compliant for the late updates to the registry as detailed in **section 4.1**. They are working with this trader to ensure that the expected process is followed.
- Five ICPs were confirmed not to have distributed generation installed, or installed but not grid connected, and the trader and MEP have updated the registry to correct.
- Two have been connected and updated on the registry since the site audit.

- One was not identified via the registry discrepancy reporting and therefore missed. The query has been updated to capture any further instances.

I recommend that the EIEP1 file is used to confirm if generation is present in the file.

Description	Recommendation	Audited party comment	Remedial action
Distributors to provide ICP information	I recommend that the EIEP1 file is checked to identify distributed generation.	EIEP1 is now checked to identify un-authorised distributed generation. Plus NTL have new discrepancies queries which can pick up energy direction flow I with settlement indicators of Y on the registry which we have not authorised	Identified

I checked a sample of ten ICPs with distributed generation and confirmed that the generation capacity and fuel type were correct.

#### Initial Electrical Connection Date

The initial electrical connection date is advised to Network Tasman daily from the approved field contractors. Upon receipt of this information Network Tasman populates the initial electrical connection date in the database and pushes it to the registry. 1,104 ICPs have had the initial electrical connection date updated between 1/07/17 and 31/05/19. The list file found all ICPs electrically connected during the audit period had an initial electrical connection date populated.

I checked the accuracy of the initial electrical connection date against the active date and meter certification date from the EDA for all ICPs made active and found:

- 1,104 ICPs with both the initial electrical connection date populated and active date. Of these
  - 1,096 (99%) had matching dates.
  - Eight ICPs had a different active date. These were all checked and confirmed that Network Tasman's initial electrical connection date was correct.

The list file was checked since part ten came into effect for any active ICPs that have no initial electrical connection date recorded or ICPS made active prior to part ten that have an initial electrical connection date populated and confirmed that all ICPs had a date recorded.

#### Unmetered Load

Network Tasman has robust processes in place for the management of unmetered load. All unmetered load ICPs have had their capacity and "on time" confirmed through a field audit. Network Tasman are required to update these details "if known".

Network Tasman uses the recommended format for updating the registry. I compared the daily kWh figures based on Network Tasman's data to the traders' daily unmetered kWh figures and found that 180 (94%) of 192 ICPs matched. Ten of the 12 ICPs where the load did not match were distributed unmetered load ICPs. Network Tasman update the registry with DUML figures as the lamp wattage changes, new lights are added in new subdivisions or along streets, and when streetlights are removed. A check of the Registry shows the Retailer DUML figures are only updated monthly. This process has been audited separately as part of the streetlight audit regime. The remaining two ICPs have no unmetered load recorded by Network Tasman. These were examined:

ICP	Trader	Network Tasman Daily kWh	Retailer Daily kWh	Notes
0000019872NT1FA	TRUS	-	1.04	This private streetlight has been removed. Network Tasman have advised the trader and they have removed the unmetered load.
0000051570NT2E2	CTCT	-	1.00	Network Tasman has confirmed there is no unmetered load present. The trader has since removed the unmetered load

Any new unmetered load connections are actively discouraged, and no new unmetered loads have been connected during the audit period.

#### Audit outcome

Compliant

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

##### Code reference

*Clause 7(3) Schedule 11.1*

##### Code related audit information

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

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

##### Audit observation

The management of registry information was reviewed. The registry list and event detail report for 01/07/17 to 31/05/19 were reviewed to determine compliance.

##### Audit commentary

I confirmed that the registry was updated prior to electrical connection for all ICPs created during the audit period. Placeholder values are not used.

#### Audit outcome

Compliant



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

##### Code reference

*Clause 7(8) and (9) Schedule 11.1*

##### Code related audit information

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

##### Audit observation

The registry list as at 31/05/19 was reviewed to determine compliance.

##### Audit commentary

GPS co-ordinates are not recorded, and Network Tasman do not have any plans to populate GPS co-ordinates.

##### Audit outcome

Not applicable

#### 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

Network Tasman’s current process is to create the majority of ICPs at the “ready” status.

The registry list showed 59 ICPs currently at “ready” status, none have been at “ready” status for more than two years. This is discussed further in **section 3.14**.

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

##### Audit commentary

As noted in **section 3.2**, ICP requests come directly from customers or their agents. Some traders have provided blanket approval ICPs to be created at “Ready”. For other traders ICPs are created at “New” and changed to “Ready” once the trader has provided confirmation of their acceptance by an email to Network Tasman, or through the provision of a service request to the livening agent which is then forwarded to Network Tasman.

The price category field in Network Tasman’s ICP database contains a “drop down” list, which ensures each ICP can only have a single price category.

## Audit outcome

Compliant

### 4.10. Management of “distributor” status (Clause 16 Schedule 11.1)

#### Code reference

*Clause 16 Schedule 11.1*

#### Code related audit information

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

#### Audit observation

Processes to manage the “distributor” status were reviewed.

The registry list and event detail report for 01/07/17 to 31/05/19 were reviewed to identify ICPs at the “distributor” status and check compliance.

#### Audit commentary

Network Tasman has eight shared unmetered load parent ICPs that have an ICP status of “Distributor”. There have been no Distributor ICPs created during the audit period.

## Audit outcome

Compliant

### 4.11. Management of “decommissioned” status (Clause 20 Schedule 11.1)

#### Code reference

*Clause 20 Schedule 11.1*

#### Code related audit information

*The ICP status of “decommissioned” must be managed by the distributor and indicates that the ICP is permanently removed from future switching and reconciliation processes (Clause 20(1) of Schedule 11.1).*

*Decommissioning only occurs when:*

- *electrical installations associated with the ICP are physically removed (Clause 20(2)(a) of Schedule 11.1); or*
- *there is a change in the allocation of electrical loads between ICPs with the effect of making the ICP obsolete (Clause 20(2)(b) of Schedule 11.1); or*
- *in the case of a distributor-only ICP for an embedded network, the embedded network no longer exists (Clause 20(2)(c) of Schedule 11.1).*

#### Audit observation

The decommissioning process was examined.

The registry list and event detail report for 01/07/17 to 31/05/19 were reviewed to identify ICPs at the “decommissioned” or “ready for decommissioning” status.

A diverse sample of five “decommissioned” ICPs was examined. I also examined the one ICP at the “ready for decommissioning” status.

### Audit commentary

Network Tasman manages ICP decommissioning and the process is well documented with strong controls in place. Customers or their agents make all decommissioning requests directly to Network Tasman on the same NCA form as used for new connections, which includes approval from the customer. An approved contractor then completely removes the service connection and metering. While onsite the contractor phones Network Tasman to confirm the physical decommission has been carried out. The NCA form is completed along with an “as built” plan, which details exactly what has physically occurred on site. The paperwork is required to be back with Network Tasman within two days. The NCP label is also returned, and a check occurs to ensure the correct ICP has been decommissioned. Once the physical work is complete, notification is made to the relevant trader to change the ICP status to “Ready for decommissioning” (1,6), so that Network Tasman can change the status to “Decommissioned” (003). Network Tasman monitor ICPs at the 1,6 status to ensure the process is being completed in a timely manner.

Network Tasman’s list file shows that there was one ICP at this status at the time of the audit analysis. ICP 0000008208NT57D has since been decommissioned.

The sample checked confirmed that all ICPs have been decommissioned for the correct date.

### 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

Three new price codes were uploaded on 29/01/19 with an effective date of 1/04/2019. This was notified more than two months of the price code coming into effect.

### Audit outcome

Compliant

## 5. CREATION AND MAINTENANCE OF LOSS FACTORS

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

#### Code reference

*Clause 21 Schedule 11.1*

#### Code related audit information

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

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

*A loss category code takes effect on the specified date.*

#### Audit observation

The loss category code table on the registry was examined.

#### Audit commentary

No new loss category codes have been created during the audit period.

#### Audit outcome

Compliant

### 5.2. Updating loss factors (Clause 22 Schedule 11.1)

#### Code reference

*Clause 22 Schedule 11.1*

#### Code related audit information

*Each loss category code must have a maximum of 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

There have been no changes to loss category codes 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 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 two embedded networks, the embedded network owner must give written notice to the reconciliation manager of the creation or decommissioning.*

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

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

- give written notice to the reconciliation manager*
- give written notice to the Authority*
- give written notice to each affected reconciliation participant*
- comply with Schedule 11.2.*

#### Audit observation

The NSP table was examined.

#### Audit commentary

No NSPs have been created or decommissioned during the audit period.

#### Audit outcome

Compliant

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

#### Code reference

*Clause 26(1) and (2) Schedule 11.1*

#### Code related audit information

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

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

#### Audit observation

The NSP table was examined.

#### **Audit commentary**

No NSPs have been created or decommissioned during the audit period.

#### **Audit outcome**

Compliant

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

#### **Code reference**

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

#### **Code related audit information**

*If a participant has notified the creation of an NSP on the distributor's network, the distributor must give written notice to the reconciliation manager of the following:*

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

#### **Audit observation**

The NSP table was reviewed.

#### **Audit commentary**

No balancing area changes have occurred 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 one month before the creation or transfer of:*

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

#### **Audit observation**

The NSP table was reviewed.

#### **Audit commentary**

Network Tasman has not created any new embedded networks during the audit period.

#### **Audit outcome**

Compliant

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

##### Code reference

*Clause 24(2) and (3) Schedule 11.1*

##### Code related audit information

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

##### Audit observation

The NSP table was reviewed.

##### Audit commentary

No balancing area changes have occurred during the audit period for Network Tasman's NSPs.

##### Audit outcome

Compliant

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

##### Code reference

*Clause 27 Schedule 11.1*

##### Code related audit information

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

##### Audit observation

The NSP table was reviewed.

##### Audit commentary

No existing ICPs became NSPs during the audit period.

##### Audit outcome

Compliant

#### 6.7. Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)

##### Code reference

*Clause 1 to 4 Schedule 11.2*

##### Code related audit information

*If the distributor wishes to transfer an ICP, the distributor must give written notice to the Authority in the prescribed form, no later than three business days before the transfer takes effect.*

##### Audit observation

The NSP table was reviewed.

#### **Audit commentary**

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

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clause 10.25(1) and 10.25(3)*

#### **Code related audit information**

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

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

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

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

#### **Audit observation**

The NSP supply point table was examined.

#### **Audit commentary**

Network Tasman is not responsible for any NSPs that are not connected to the grid.

#### **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

Network Tasman 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 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

Network Tasman 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**

Network Tasman is not responsible for any embedded network gate meters.

#### **Audit outcome**

Compliant

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

#### **Code reference**

*Clauses 5 and 8 Schedule 11.2*

#### **Code related audit information**

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

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

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

#### **Audit observation**

The NSP supply point table was reviewed.

#### **Audit commentary**

Network Tasman 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**

Network Tasman 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 list for 01/07/17 to 31/05/19 was reviewed to identify any ICPs with shared unmetered load connected.

#### Audit commentary

Network Tasman has eight shared unmetered load “distributor only” ICPs. No new shared unmetered load has been connected or identified during the audit period.

#### 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 list for 01/07/17 to 31/05/19 was reviewed to identify any ICPs with shared unmetered load connected.

#### Audit commentary

There have been no changes to the ICPs with shared unmetered load during the audit period. These were checked and confirmed that all ICPs had the correct load and this load matched to the retailers recorded load.

#### Audit outcome

Compliant

## 8. CALCULATION OF LOSS FACTORS

### 8.1. Creation of loss factors (Clause 11.2)

#### Code reference

Clause 11.2

#### Code related audit information

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

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

#### Audit observation

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

I reviewed correspondence and documentation relating to the loss factor review.

#### Audit commentary

The EA provided the following UFE graph indicating that losses for Network Tasman are running at approximately 1.5%. This is outside of the target 1% threshold.

Network Tasman have reviewed their losses and believe them to be less than 1%. The difference between Network Tasman’s losses and those calculated from the Reconciliation Manager has been raised with the Reconciliation Manager. Network Tasman’s losses have been reviewed by Bernie Cross of Contact Energy and Steve Woods (Electricity Authority approved auditor). They came to the conclusion that the Network Tasman loss calculations appeared to be correct and that potentially the losses being calculated by the Reconciliation Manager’s system needed to be reviewed. This variance appears to have started when Nelson Electricity moved to a grid connection. The Reconciliation Manager indicated in an email dated December 17, 2018 to Network Tasman, that this was going to be investigated in conjunction with Ron Beatty from the Electricity Authority. That Reconciliation Manager has since left and there has been no further communication in relation to this. I raise this as an issue to be investigated.

Issue	Description	Remedial action
Loss factors	Investigation required into the UFE calculations used by the Reconciliation Manager system.	NTL await further communication from the Reconciliation Manager

Based on the information provided I believe that the Network Tasman loss calculations are correct, and compliance is confirmed.

#### Audit outcome

Compliant

## CONCLUSION

Network Tasman were one of the first Distributor's to be awarded a 24-month audit period due to the high level of compliance found and the robust controls in place. This is their second audit since the new audit regime came into effect in June 2017. I have found a similar high level of compliance and robust controls in place.

I have raised one issue in relation to the calculation of loss factors. Network Tasman and Nelson Electricity's loss factor calculations both appear to be reasonable but the UFE graphs indicate that losses for both networks are outside the expected +/- 1% threshold. This variance appears to have started when Nelson Electricity moved to a grid connection. Network Tasman have been in communication with the Reconciliation Manager in December 2018 and he indicated that this was going to be investigated but the person has since left and there has been no further communication. This is discussed in **section 8.1**.

This audit found two minor non-compliances and makes one recommendation. This excellent result reflects Wendy's continued hard work and diligence in her role. The indicative audit frequency table indicates the next audit should be in 24 months and I agree with this recommendation.

## PARTICIPANT RESPONSE

Network Tasman Limited welcomed the opportunity for the 2019 audit of our systems, processes and compliance by an Electricity Authority approved auditor. We view the audit as an opportunity to identify shortfalls in our processes that can result in non-compliance and confirmation that our aim for 100% compliance is on track.

Network Tasman engaged Rebecca Elliot – Veritek for this 24 month audit period based on her professionalism, vast knowledge and cohesive approach to the audit process. We take this opportunity to thank Rebecca for her services.

While Network Tasman is confident it has robust processes in place to capture information in an accurate and timely manner in order to comply with the Code, we continue to review our processes for improvement.

Shortly before the 2019 on site audit, Network Tasman Limited developed 8 new queries to identify ICP discrepancies in a timely manner, giving us the opportunity to correct/or ask another participant to correct their information on the Registry before the mistake/omission has the potential to impact on another participant. Our discrepancy report now looks at 44 different scenarios.

Our 2019 Audit identified a small number of non-compliance issues. NTL have broken down the non-compliance issues into two categories.

- Human Resources

Although Network Tasman considers each breach identified as part of this audit to be undesirable, it is unrealistic to resource our registry compliance functions to a level that will eliminate all possibility of breaching in the future. The cost of doing so would dwarf any future benefits. Network Tasman acknowledges that this approach carries a small risk of future non-compliance.

- Beyond our Control

A number of Network Tasman's "late updates" to the Registry were due to not receiving information in a timely manner from authorised contractors, late status updates made by another participant which restricted NTL from completing their update in a timely manner i.e. decommissions, and connection of unauthorised distributed generation by an Electricity Participant. NTL continue to impress the importance of receiving accurate information in a timely manner and follow correct processes to outside parties.

The Authority/Auditor sets the timeframe for each distributor's next audit, based on the performance of their most recent audit. Those with better audit results are granted a longer period between audits, ostensibly as a reward for good performance. Following the 2017 audit, based on performance, Network Tasman Limited was granted a 24 month audit period. We wish to question the benefits of an extended audit time frame given the volume of work (in one hit) for the 24 month audit matched the same volume of work for 2 x 12 month audits. We assume this was also the case for the auditor.