

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

THE LINES COMPANY

Prepared by: Rebecca Elliot

Date audit commenced: 6 November 2018

Date audit report completed: 7 December 2018

Audit report due date: 21-Dec-18

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EXECUTIVE SUMMARY

This Distributor audit was performed at the request of **The Lines Company Ltd (TLC)** 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 TLC's premises in Te Kuiti on December 4th, 2018.

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

TLC moved from Gentrack to the Orion platform on October 1st, 2018. A material change audit was undertaken by Steve Woods of Veritek prior to this change. I have reviewed that audit as part of this audit. This audit covers the period when Gentrack was still in use. When describing processes, I have described the current processes used in Orion.

The new system is performing well and has greatly improved TLC's interaction with the registry. Registry validation has been put in place. This is sitting with the project team until all validations have been fully developed and put in place. The full benefit of the new Orion system cannot be seen in this audit as it has only been in place for six weeks, however I am confident having seen the system in operation that it should perform the required functions as expected.

The loss factor guidelines published in June 2018, are being reviewed and TLC intend to adopt the methodology and put in place a process to undertake loss factor reviews on a regular basis.

This audit found 11 areas of non-compliance and makes three recommendations. The next audit frequency table indicates that the next audit be due in six months. I have considered this result in conjunction with the fact that much of the audit period covered relates to the Gentrack system and the responses from TLC and I recommend that the next audit be due in 12 months.

I thank Melanie and her team for their time and co-operation for this audit.

The matters raised are shown in the tables below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Provide complete and accurate information	2.1	11.2(1)	Registry validation not identifying active ICPs with missing initial electrical connection dates or potential distributed generation where TLC have none recorded. Two ICPs with the incorrect decommission event date recorded.	Moderate	Low	2	Identified
Create ICPs	3.1	11.4	ICP not created for lighting for flats in Kaka Street.	Strong	Low	1	Identified
Participants may request distributor to create ICPs	3.2	11.5(3)	ICPs not created within 3 days of request from retailer.	Moderate	Low	2	Identified
Timeliness of provision of information	3.4	7(2) of Schedule 11.1	Required information for one ICP not populated to registry prior to electricity being traded.	Moderate	Low	2	Identified
Timeliness of provision of the initial electrical connection date	3.5	7(2A) of Schedule 11.1	Late population of the initial electrical connection date for five ICPs.	Moderate	Low	2	Identified
Connection of ICPs	3.6	11.17	One ICP electrically connected before the trader's information was populated to the registry.	Moderate	Low	2	Identified
Management of "new" status	3.13	13 of Schedule 11.1	ICP 0001112806WM204 incorrectly recorded at the "new" status on the registry.	Moderate	Low	2	Identified
Changes to registry information	4.1	8 of Schedule 11.1	Some backdated price, network, status, and address changes.	Moderate	Low	2	Identified

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
ICP location address	4.4	2 Schedule 11.1	96 duplicate addresses exist, and 58 addresses do not have street numbers or other information to allow the ICP to be readily located.	Strong	Low	1	Identified
Distributors to Provide ICP Information to the Registry	4.6	7(1) Schedule 11.1	<p>Incorrect ICP designation flag for 778 ICPs.</p> <p>37 active ICPs with no initial electrical connection dates recorded.</p> <p>One incorrect initial electrical connection date.</p> <p>2 ICPs with incorrect distributed generation details (one incorrect fuel type and one with the incorrect event date).</p>	Weak	Low	3	Identified
Responsibility for metering information for NSP that is not a POC to the grid	6.8	10.25(1) and 10.25(3)	Meter certification not notified within 20 business days of recertification.	Moderate	Low	2	Investigating
Future Risk Rating						21	
Indicative Next Audit Frequency						6 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	Description
Provision of ICP Information to the registry manager	3.3	Consider automating the population of the “export network changes” field to minimise the possibility of data not being populated on the registry.	This recommendation is included in stage 2 deliverables of ORION project. Delivery 2019 Q1
Electrical connection of a point of connection	3.16	Review streetlight circuit connection process to ensure that these are associated with an ICP prior to electrical connection.	Streetlight circuit process to be reviewed.
Distributors to Provide ICP Information to the Registry	4.6	Livening paperwork is provided to support electrical connection dates advised from FCLM.	Review planned of new connection process and end to end workflow.

ISSUES

Subject	Section	Issue	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

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

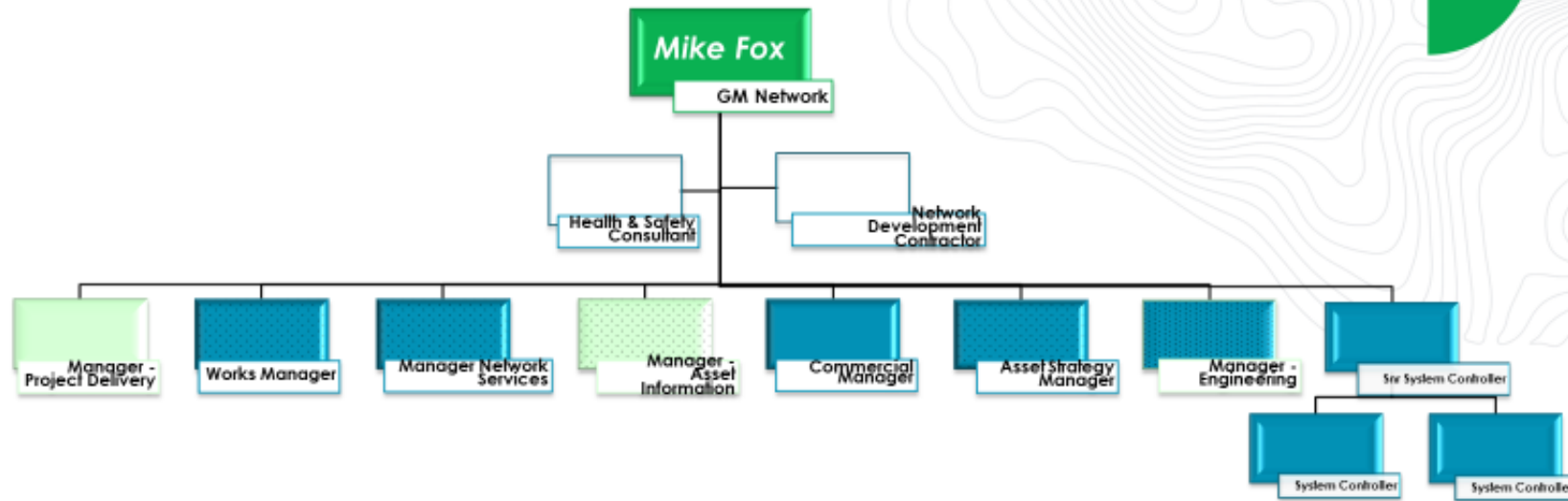
Audit commentary

Review of exemptions on the Authority website confirmed that there are no exemptions in place relevant to the scope of this audit.

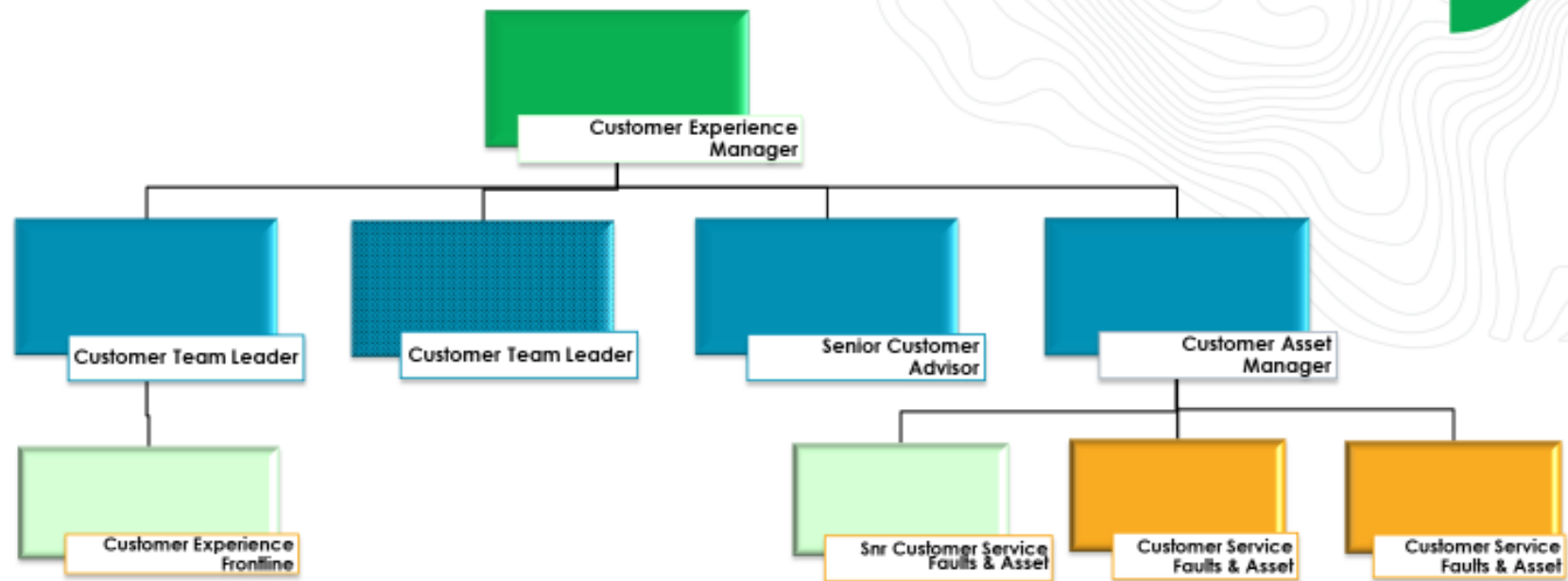
1.2. Structure of Organisation

TLC provided an organisational structure:

Network



Customer Services



1.3. Persons involved in this audit

Auditor:

Rebecca Elliot

Veritek Limited

Electricity Authority Approved Auditor

Name	Title	Organisation
Brabbyn Osburne	Network Performance Engineer	The Lines Company
Delwyn Spencer	Customer Asset Manager	The Lines Company
Melanie Barton	Senior Business Analyst	The Lines Company
Tony McGeady	Director	Prova Concepts Ltd

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

TLC does not subcontract any activities within the scope of this audit.

Audit commentary

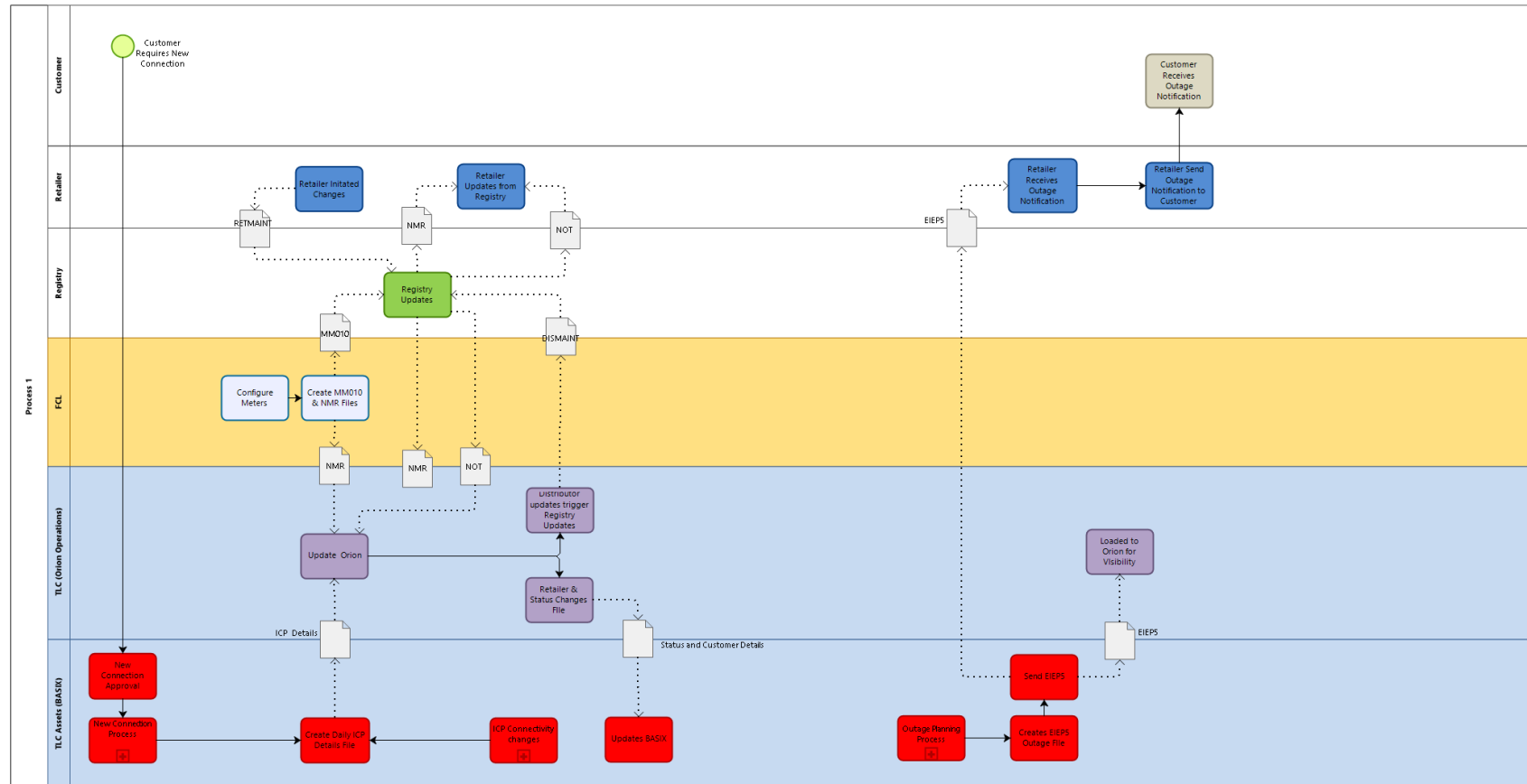
Not applicable

1.5. Supplier list

TLC does not subcontract any activities within the scope of this audit.

1.6. Hardware and Software

TLC have changed their IT platforms during the audit period. This was reviewed as part of the material change audit undertaken by Steve Woods of Veritek in February 2018. Approval was granted for the material change by the Electricity Authority. TLC provided the diagram below showing the integration of the Orion system with other systems and processes:



1.7. Breaches or Breach Allegations

TLC has no breach allegations recorded by the Electricity Authority that relate to this audit.

1.8. ICP and NSP Data

The table below lists the relevant NSPs, and their associated balancing areas. There have been no changes made during the audit period.

Dist	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
LINE	ATI0111	ATIAMURI	HTI0331	LINE	NORTHLINEG	I	1/05/08	-
LINE	HTI0331	HANGATIKI			NORTHLINEG	G	1/02/12	13,078
LINE	MEP0112	MOKAI	HTI0331	LINE	NORTHLINEG	I	16/02/12	-
LINE	MEP0113	MOKAI	HTI0331	LINE	NORTHLINEG	I	16/02/12	-
LINE	NPK0331	NATIONAL PARK			CENTRALLINEG	G	1/07/11	1,004
LINE	OKN0111	OHAKUNE			OKN0111LINEG	G	1/05/08	2,236
LINE	ONG0331	ONGARUE			CENTRALLINEG	G	1/05/08	5,585
LINE	TKU0331	TOKAANU			CENTRALLINEG	G	1/05/08	5,188
LINE	WKM0331	WHAKAMARU	HTI0331	LINE	NORTHLINEG	I	1/05/08	149

TLC provided a list of all ICPs as at 15/11/18 by way of a registry “list file”. A summary of this data by “ICP status” is as follows:

Status	Number of ICPs 2018	Number of ICPs 2017	Number of ICPs 2016	Number of ICPs 2015
Distributor (888)	0	0	0	0
New (999)	1	0	0	0
Ready (000)	26	8	9	7
Active (2,0)	23,596	23,501	23,311	23,766
Inactive - new connection in progress (1,12)	37	34	28	25
Inactive – vacant (1,4)	295	435	752	909
Inactive - reconciled elsewhere (1,5)	TBC	1		
Inactive – AMI remote disconnection (1,7)	TBC	1	0	1
Inactive – disconnected due to meter disconnected (1,8)	64	50	38	104
Inactive – at pole fuse (1,9)	2	1	1	0
Inactive – disconnected at meter box switch (1,10)	1	0	0	0
Inactive - at meter box switch (1,11)	5	9	57	415
Inactive – ready for decommissioning (1,6)	42	76	52	67
Decommissioned (3)	3,175	2,832	2,502	2,269

1.9. Authorisation Received

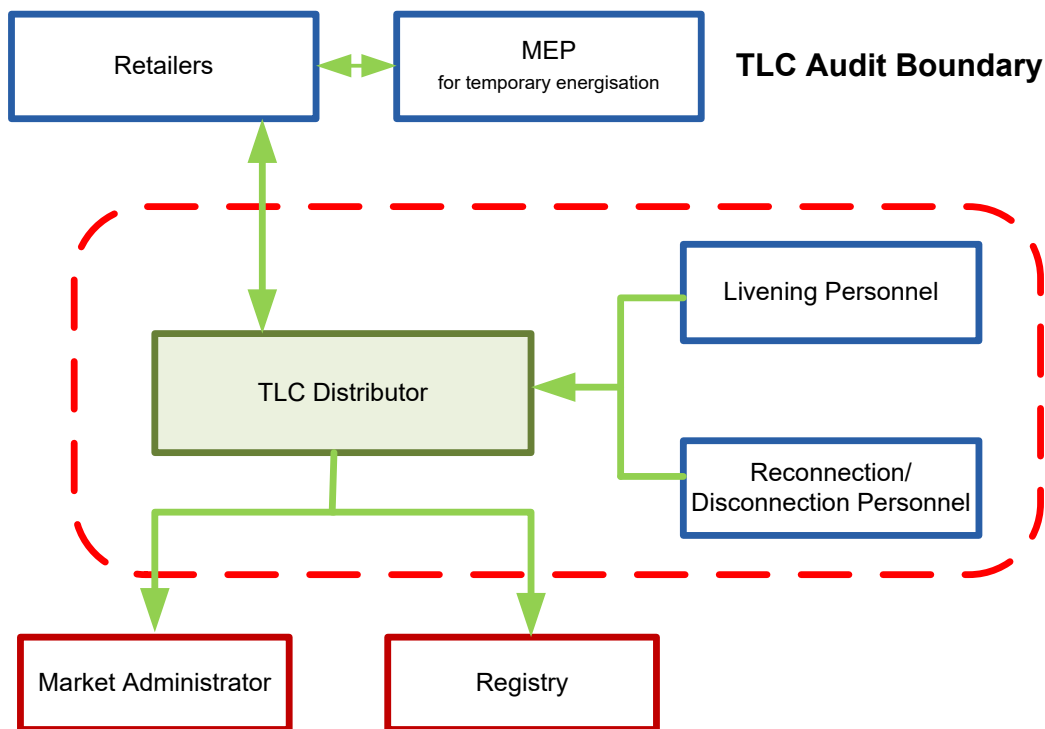
TLC provided a letter of authorisation to Veritek, permitting the collection of data from other parties for matters directly related to the audit.

1.10. Scope of Audit

This Distributor audit was performed at the request of TLC, to encompass the Electricity Industry Participation Code requirement for an annual audit, in accordance with clause 11.10 of part 11. The audit was carried out at TLC’s premises in Te Kuiti, on December 4th, 2018.

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 TLC audit boundary shown for clarity.



All activities covered by this audit are conducted at TLC's office in Te Kuiti.

1.11. Summary of previous audit

TLC provided a copy of their previous distributor audit report, completed by Rebecca Elliot of Veritek Limited in September 2017. TLC undertook a material change audit in February 2018. The statuses of the previous non-compliances and recommendations are detailed below:

TABLE OF NON-COMPLIANCE

Subject	Section	Clause	Non-compliance	Status
Provide complete and accurate information	2.1	11.2(1)	No registry validation in place to ensure information is correct and accurate. Distributed generation recorded on the registry at the point of application and not connection could be misleading to retailers.	Still existing
Correct errors	2.2	11.2(2)	Errors not fixed as soon as practicable. No registry validation process in place.	Cleared

Subject	Section	Clause	Non-compliance	Status
Participants may request distributor to create ICPs	3.2	11.5(3)	ICPs not created within 3 days of request from retailer.	Still existing
Provision of ICP information	3.3	11.7	One ICP sent to the registry with information missing.	Cleared
Timeliness of provision of information	3.4	7(2) of Schedule 11.1	Two ICPs not populated to registry prior to electricity being traded.	Still existing
Timeliness of provision of the initial energisation date	3.5	7(2A) of Schedule 11.1	Late population of the initial energisation date.	Still existing
Connection of ICPs	3.6	11.17	Two ICPs energised before the trader's information was populated to the registry.	Still existing
Electrical connection of ICPs	3.7	10.28(7)	Two ICPs electrically connected prior to retailer accepting responsibility.	Cleared
Electrical connection of ICP that is not an NSP	3.8	10.31	Two ICPs electrically connected prior to retailer accepting responsibility.	Cleared
Changes to registry information	4.1	8 of Schedule 11.1	Registry event updates backdated greater than three days or in the case of 1 ICP an NSP change greater than 23 days.	Still existing
Notice of NSP	4.2	7(1),(4) and (5) Schedule 11.1	Two ICPs mapped to the incorrect NSP.	Cleared
ICP location address	4.4	2 Schedule 11.1	Some duplicate addresses exist, and some addresses do not have street numbers or other information to allow the ICP to be readily located.	Still existing
Distributors to Provide ICP Information to the Registry	4.6	7(1) Schedule 11.1	Distributed generation recorded on the registry prior to being electrically connected. Incorrect installation type of "L" instead of "B" for 3 ICPs. IED missing for 19 ICPs.	Still existing

RECOMMENDATIONS

Subject	Section	Clause	Recommendation	Status
Participants may request distributor to create ICPs	3.2	11.5(3)	For any instances where the ICP is not created within 3 business days of the retailer's request send a notification to the retailer advising of the reason.	Still existing
Distributors to Provide ICP Information to the Registry	4.6	7(1) Schedule 11.1	Adopt the recommended format for the population of unmetered load details.	Cleared
Notification of shared unmetered load ICP list	7.1	11.14(2) and (4)	Liaise with Waitomo District Council to determine the correct owners of potential shared unmetered load.	Cleared

TLC provided a copy of their material change audit report for the replacement of Gentrack with Orion. Compliance was recorded and four recommendations for improvement were made. The statuses of the recommendations are detailed below:

Subject	Section	Clause	Recommendation	Status
Registry error correction	2.2	11.2(2)	Test the monthly registry validation and reporting process and provide results.	Cleared
Provision of registry information	3.3	11.7	Consider automating the population of the "export network changes" field to minimize the possibility of data not being populated on the registry.	Planned
Develop and test reporting of ICPs at new or ready for 24 months	3.13	15 of Schedule 11.1	Develop and test reporting of ICPs at new or ready for 24 months.	In progress
Population of IECD	4.6	7(1) of Schedule 11.1	Develop reporting to ensure all newly created ICPs have the IECD populated.	In progress

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

TLC data management processes were examined. The list file as at 15/11/18, was examined to confirm compliance.

Audit commentary

TLC moved to the Orion platform from 1/10/18. Registry validation processes have been put in place as part of this. This function is currently sitting within the project team, so they can ensure that all validations have been identified and are performing as expected. This is to be moved to BAU prior to Christmas.

Registry validation is run from Orion. Currently a list file is drawn fortnightly and run against the data in Orion by the project team. This produces an exceptions report which is analysed, and any discrepancies are corrected. When this process is handed over it will be run on a monthly basis. This process was viewed during the site audit. Some reporting is still being developed. Specifically:

- identification of active ICPs with missing initial electrical connection dates or initial electrical connection date discrepancies;
- distributed generation indicated by the trader's profile, but none recorded by TLC (to assist in identifying potential distributed generation sites not yet recorded by TLC) for investigation; and
- correct NSP allocation for an ICP.

These are being added to the reporting suite. These ICPs are discussed in **section 4.6**. This is recorded as non-compliance.

Examination of ICPs at the decommissioned status found but that event date didn't match to the date of decommissioning for two of these ICPS. This was prior to Orion being used and was due to human error. This is detailed further in **section 4.11** and is recorded as non-compliance below.

Orion receives the registry acknowledgement files. These are reviewed and actioned if required. This is an improvement from the Gentrack system where registry acknowledgement files were not always being actioned and not all information was able to be stored in Gentrack. Orion manages all registry fields. This process was viewed during the site audit.

I noted in the last audit that distributed generation was being recorded on the registry at the point of application. This is now only recorded on the registry once it has been confirmed to be installed.

Overall the accuracy of data is much improved from the last audit.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 2.1 With: 11.2(1) From: 01-Jul-17 To: 15-Nov-18	Registry validation not identifying active ICPs with missing initial electrical connection dates, or potential distributed generation where TLC have none recorded or incorrect NSPs. Two ICPs with the incorrect decommission event date recorded. Potential impact: Low Actual impact: Low Audit history: Three times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate as registry validation processes have been put in place as part of the change to Orion and further validations are in the process of being added - controls are expected to be strong once these have been deployed. The audit risk is rated as low as missing IECD has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
Data to be corrected.		2019 Q1	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

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

TLC data management processes were examined. The list file as at 15/11/18 was examined to confirm compliance.

Audit commentary

Orion went live 1/10/18. This includes registry validation and manages the registry acknowledgement files. This is discussed in **section 2.1**. Any errors identified are corrected as soon as practicable.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

The registry list as at 15/11/18 was reviewed to identify all new ICPs created between 01/07/17 and 15/11/18.

The new connection process was examined in detail and is described in **section 3.2** below. Five new connection applications of the 307 created were checked from the point of application through to when the ICP was created. These were selected using the typical characteristic methodology to confirm the process and controls worked in practice.

Audit commentary

TLC 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.

TLC does not have an ICP for the eight street lights associated with a set of flats in Kaka Street. This is discussed further in **section 7.1**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.1 With: 11.4 From: unknown To: 15-Nov-18	ICP not created for lighting for flats in Kaka Street. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as strong as TLC have a robust ICP creation process and these lights are an historic issue and no other such instances have been identified. I have rated the audit risk rating as low as the kWh volume associated with these lights will be small.		
Actions taken to resolve the issue		Completion date	Remedial action status
Engagement with installation owner in order to bring these lights in to compliance.		2019 Q1	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This is historic issue and unlikely to re-occur in light of proposed streetlight process review		n/a	

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 registry list as at 15/11/18 was reviewed to identify all new ICPs created between 01/07/17 and 15/11/18. The event detail report was also examined.

The new connection process was examined in detail. Five new connection applications of the 307 created during the audit period were checked from the point of application through to when the ICP was created. These were selected using the typical characteristic methodology to confirm the process and controls worked in practice.

Audit commentary

TLC's new connections process remains largely unchanged from the previous audit and is as follows:

- an application for new load (AFL) is completed by the customer or their agent and is provided to TLC;
- once the AFL has been approved, TLC sends a "Connection Agreement" to the customer, which is completed and returned;
- the customer is required to contact their retailer to "register", the retailer then issues a Service Request for livening to TLC; and
- when the connection is ready for electrical connection, the customer or their agent will contact TLC, at this point the ICP is created at "Ready".

TLC considers that the request for electrical connection (livening) is effectively the request for a new ICP. They will not create a new ICP until they have all four steps above completed. All documents are scanned and stored for future reference. The Network Information team record the date the ICP is requested in a spreadsheet. A sample of five ICPs was checked by reviewing the scanned application and ICP creation in Gentrack and on the Registry.

TLC adopted the last audit's recommendation that upon acknowledgement from the trader of their acceptance of the ICP, that if it cannot be created at that point an email is sent advising the trader of what is yet to be completed before the ICP can be created. This was evident in two of the five applications reviewed. This communication was not sent in three instances. TLC are reviewing this to ensure that this communication is sent in all instances. This is recorded as non-compliance below.

The previous audit found two ICPs that were not created on the registry until after they were electrically connected. Analysis of the event detail report found that all new ICPs which had been electrically connected were created by their initial electrical connection date.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 With: 11.5(3) From: 01-Jul-17 To: 15-Nov-18	ICPs not created within 3 days of request from retailer. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate as the process is not being followed in all instances. I have rated the audit risk rating as low there were no ICPs found to be electrically connected prior to the ICP being created.		
Actions taken to resolve the issue		Completion date	Remedial action status
Reinforcement of current business process.		immediately	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
This will be included in the scope of connections process review		2019 Q1	

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

Code reference

Clause 11.7

Code related audit information

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

Audit observation

The new connection process for populating all required registry fields was examined.

The list file as at 15/11/18 was examined for all ICPs created during the audit period. A sample of five new connections 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

ICPs are created in Orion. The operator manually checks the address to confirm that it doesn't already exist. The transformer number is advised by the Asset Management group. The operator selects the transformer and Orion brings through from Basix (TLC's asset management system) all the associated information for that transformer. This includes the NSP and loss category code associated with that NSP with the exception of large sites. In these instances, the Asset Management group will advise the correct loss factor to be applied.

The material change audit recommended automating the population of the export network changes field in Orion to ensure that any changes are automatically sent to the registry. It was not possible to include this in the go live system, but TLC intend to adopt this recommendation and it is scheduled as a part of the next round of enhancements. I have repeated the recommendation to maintain visibility.

Recommendation	Description	Audited party comment	Remedial action
11.7	Consider automating the population of the “export network changes” field to minimise the possibility of data not being populated on the registry.	This recommendation is included in stage 2 deliverables of ORION project. Delivery 2019 Q1	Identified

Review of the sample of five new connections confirmed that the ICP information provided to the registry by TLC was correct.

The 2017 audit found that incomplete NSP information had been sent to the registry for ICP 0001112573WMF1E. I confirmed that this issue is cleared, and complete information is now recorded.

The registry list was reviewed to confirm complete information was present for all new connections completed during the audit period. I found that complete network information was provided for all new ICPs.

Audit outcome

Compliant

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

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

The new connection process was examined. The event detail report for audit period of 01/07/17 and 15/11/18 was examined.

Audit commentary

The distributor must provide to the registry the information listed in clause 7(1) of schedule 11.1 as soon as practicable, and before electricity is traded at the ICP. TLC continues to create ICPs at “ready”, unless they know a network extension is needed. Then the ICP is not created until the ICP is ready for connection.

307 new ICPs were created between 01/07/17 and 15/11/18, and 217 of these have been electrically connected according to TLC’s registry records. I reviewed these completed new connections on the event detail report to identify ICPs where information was provided late. The timeliness of provision of initial electrical connection dates is discussed separately in **section 3.5**.

I found all 217 ICPs had pricing information, a proposed trader, and a “ready” status recorded on the registry by the initial electrical connection date.

ICP 0001112806WM204 has had the “new” status since 10/09/18 with an electrical connection date populated for the same date. This was confirmed to have been electrically connected during the site audit. It had remained at the “new” status due to the proposed trader field not being populated. This was corrected during the site audit and the ICP moved to the “ready” status but the ICP has been consuming electricity since 10/9/18 and the trader hasn’t been able to bill or submit these volumes.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.4 With: 7(2) of Schedule 11.1 From: 10-Sep-18 To: present	Required information for one ICP not populated to registry prior to electricity being traded. Potential impact: Low Actual impact: Low Audit history: Once Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate as the reporting to identify ICPs at the incorrect status was not fully in place. This is being put in place. I have rated the audit risk rating as low as only one ICP was affected.		
Actions taken to resolve the issue		Completion date	Remedial action status
This was corrected during audit		completed	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

The event detail report for 01/07/17 to 15/11/18 and the registry list were examined to determine the timeliness and accuracy of initial electrical connection dates.

All late updates to initial electrical connection dates, and all new connections that were made active by the trader with no initial electrical connection date populated were checked.

The accuracy of initial electrical connection date is discussed further in **section 4.6**.

Audit commentary

The population of the initial electrical connection date is managed via Orion now and not directly into the registry as was previously the case.

217 initial electrical connection date events for new connections were identified in the event detail report.

212 (97.6%) of the 217 initial electrical connection dates were populated on time, and improvement from 75% on time in the 2017 audit. The five late updates were checked and found four were due to late notification from the field and one was due to human error.

37 ICPs created between 01/07/17 and 15/11/18 had been moved to “active” status by the trader but did not have an initial electrical connection date populated by TLC. These are discussed in **section 4.6**.

Late update of the initial electrical connection dates on the registry is recorded as non-compliance below.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: 7(2A) of Schedule 11.1 From: 28-Sep-17 To: 25-Oct-18	Late population of the initial Electrical connection date for five ICPs. Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Moderate Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate as the reporting to monitor this area is still to be deployed but is expected to be in place shortly. There is no impact on settlement, therefore the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
n/a		n/a	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

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

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

The event detail file and registry list for 01/07/17 to 15/11/18 were examined to determine compliance.

Audit commentary

ICPs will not be electrically connected without the agreement from the trader. Trader acceptance is confirmed during the application process.

Review of the registry list confirmed that shared unmetered load is not recorded for ICPs on TLC's network and a trader is recorded for all active and inactive ICPs.

As discussed in **section 3.4**, the new connections reviewed all had proposed trader recorded on the registry prior to initial electrical connection with the exception of ICP 0001112806WM204. This ICP has remained at the "new" status but was electrically connected on 10/9/18 therefore this occurred before a trader was recorded in the registry as accepting responsibility. This is recorded as non-compliance.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.6 With: 11.17 From: 10-Sep-18 To: present	One ICP electrically connected before the trader’s information was populated to the registry. Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Moderate Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate as the reporting to identify ICPs at the incorrect status was not fully in place. This is being put in place. I have rated the audit risk rating as low as only one ICP was affected.		
Actions taken to resolve the issue		Completion date	Remedial action status
n/a		n/a	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

3.7. Connection of ICP that is not an NSP (Clause 10.31)

Code reference

Clause 10.31

Code related audit information

- (1) Only a distributor may, on its network, connect an ICP that is not an NSP.
- (2) Despite subclause (1), a distributor must not connect an ICP that is not an NSP unless—
- (a) the trader trading at the ICP has requested the connection; or
 - (b) in the following circumstances:
 - (i) there is only shared unmetered load at the ICP; and
 - (ii) in accordance with clause 11.14, the distributor has—
 - (A) assigned the shared unmetered load; and
 - (B) advised each trader, that is responsible under clause 11.18(1) for the ICPs across which the unmetered load is shared, of that assignment.

Audit observation

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

The event detail file and registry list for 01/07/17 to 15/11/18 were examined to determine compliance.

Audit commentary

ICPs will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. Trader acceptance is confirmed during the application process.

As discussed in **section 3.4**, the new connections reviewed all had proposed trader recorded on the registry prior to initial electrical connection.

In relation to ICP 0001112806WM204, which is discussed in **section 3.4**, trader permission had been granted. Therefore, compliance has been achieved in relation to this clause.

Audit outcome

Compliant

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

Code reference

Clause 10.31A & 10.31B

Code related audit information

Clause 10.31A

- (1) Subject to clause 10.33, only a distributor may, on its network, temporarily electrically connect an ICP that is not an NSP.*
- (2) A distributor may only temporarily electrically connect an ICP that is not an NSP—*
 - (a) if a metering equipment provider requests that the distributor temporarily electrically connect the ICP for the purposes of—*
 - (i) certifying a metering installation at the ICP; or*
 - (ii) maintaining, repairing, testing, or commissioning a metering installation at the ICP; or*
 - (b) in the following circumstances:*
 - (i) there is only shared unmetered load at the ICP; and*
 - (ii) in accordance with clause 11.14, the distributor has—*
 - (A) assigned the shared unmetered load; and*
 - (B) advised each trader, that is responsible under clause 11.18(1) for the ICPs across which the unmetered load is shared, of that assignment; and*
 - (iii) the distributor has advised those traders of the distributor's intention to temporarily electrically connect the ICP.*
- (3) Despite subclause (2)(a), a metering equipment provider must not request that a distributor temporarily electrically connect an ICP that is not an NSP unless—*
 - (a) the trader responsible for the ICP has authorised the metering equipment provider to do so; and*
 - (b) the metering equipment provider has an arrangement with that trader to provide metering services.*
- (4) Despite subclause (2)(b), the distributor need not advise the traders of the distributor's intention to temporarily electrically connect the ICP if—*
 - (a) advising all traders would impose a material cost on the distributor; and*
 - (b) in the distributor's reasonable opinion, advising the traders would not result in any material benefit to any of the traders.*

Clause 10.31B

(1) A distributor may electrically connect an ICP that is not an NSP only if—

(a) there is only shared unmetered load at the ICP; and

(b) in accordance with clause 11.14, the distributor has—

(i) assigned the shared unmetered load; and

(ii) advised each trader, that is responsible under clause 11.18(1) for the ICPs across which the unmetered load is shared, of that assignment; and

(c) the distributor has advised those traders of the distributor's intention to electrically connect the ICP.

(2) Despite subclause (1)(b), the distributor need not advise the traders of the distributor's intention to electrically connect the ICP if—

(a) the distributor is doing so following a maintenance outage; and

(b) advising all traders would impose a material cost on the distributor; and

(c) in the distributor's reasonable opinion, advising the traders would not result in any material benefit to any of the traders.

Audit observation

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

The event detail file and registry list were examined to determine compliance.

Audit commentary

Any ICPs that are temporarily electrically connected follow the same process as those all other new connections. No temporarily electrically connected ICPs were identified.

Audit outcome

Compliant

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

Code reference

Clause 10.30

Code related audit information

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

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

No new NSPs that are not points of connection to the grid were connected 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 that are not points of connection to the grid were connected during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 1(1) Schedule 11.1

Code related audit information

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

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 new connection process was examined, and a sample checked. This is detailed in **section 3.1**.

Audit commentary

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

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

The process of allocation of the loss category was examined.

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

Audit commentary

The loss category is assigned to the ICP based on the transformer and therefore the NSP the ICP is connected to with the exception of large new connections. In these instances, the Asset Management group will advise the correct loss factor to be applied.

Each active ICP only 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

The new connection process was examined. The list and event detail files for 01/07/17 to 15/11/18 were examined in relation to the use of the “new” status.

Analysis of the list file found 14 ICPs that had been or were at the “new” status. These were checked to confirm that the status is being used correctly.

Audit commentary

TLC’s new connections process remains unchanged during the audit period. ICPs are created at the “ready” status. The “new” status is applied via the registry when decommissioning an ICP set up in error.

A review of the event detail report identified 14 ICPs that had been at the “new” status during the audit period and have since been updated to another status. These were reviewed.

- Seven of these occurred within days of Orion going live and were the result of operators getting used to the new system. The ICP’s had been created but were missing information resulting in them going to the registry at the “new” status. In all instances the missing information was populated on the same day (within minutes of the initial “new” status) and the ICP was updated to “ready”.
- Six ICPs were moved to the “new” status due to the correction to the first active date.
- ICP 0001112906WMB00 had a change of trader and was moved to the “new” status to process this change.

ICP 0001112806WM204 has had the “new” status since 10/09/18 with an electrical connection date populated for the same date. This was confirmed to have been electrically connected during the site audit. It had remained at the “new” status due to the proposed trader field not being populated due to human error. This was corrected during the site audit and the ICP moved to the “ready” status.

The monitoring of ICPs at the “new” and “ready” statuses is discussed in **section 3.14**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.13 With: 13 of Schedule 11.1 From: 10-Sep-18 To: 04-Dec-18	ICP 0001112806WM204 incorrectly recorded at the “new” status on the registry. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as weak as the reporting to identify ICPs at the incorrect status was not fully in place. This is being put in place. I have rated the audit risk rating as low as only one ICP was found to be affected.		
Actions taken to resolve the issue		Completion date	Remedial action status
Corrected during audit		completed	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

If an ICP has had the status of “new” or has had the status of “ready” for 24 months or more:

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

Audit observation

The management of ICPS at the “new” and “ready” status was examined. The list file as at 15/11/18 was examined.

Audit commentary

TLC continues to use a tracking spreadsheet to manage ICPs that have been at “ready” status for more than 24 months until the reporting is fully deployed in the Orion system. This is expected to be in place imminently.

No ICPs were found to be at “new” for more than 24 months, and one ICP was found to be at “ready” for more than 24 months.

ICP	Proposed Trader	Creation Date	ICP Status
0001112504WM789	TRUS	4/11/2016	000

This was examined during the site audit and has been managed via TLC’s existing process. It has since been confirmed with the trader to no longer be required and has been decommissioned - set up in error.

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 event detail file and registry list for 01/07/17 to 15/11/18 were reviewed to confirm compliance.

Audit commentary

TLC has no generation greater than 10MW, so no ICPs require a unique loss category.

Audit outcome

Compliant

3.16. Electrical connection of a point of connection (Clause 10.33A)

Code reference

Clause 10.33A

Code related audit information

- (1) A reconciliation participant may electrically connect a point of connection, or authorise the electrical connection of a point of connection, only if—*
 - (a) the reconciliation participant is recorded in the registry as being responsible for the ICP; and*
 - (b) one or more certified metering installations are in place at the ICP in accordance with this Part; and*
 - (c) in the case of an ICP that has not previously been electrically connected, the owner of the network to which the point of connection is connected has given written approval of the electrical connection.*
- (2) A reconciliation participant described in subclause (1)(a)—*
 - (a) may authorise the electrical connection of an ICP if—*
 - (i) a metering installation is in place at the ICP; and*
 - (ii) the metering installation is operational but not certified; and*
 - (iii) the reconciliation participant arranges for the certification of the metering installation to be completed within five business days of the ICP being electrically connected;*
 - (b) may electrically connect an ICP if the point of connection is solely for unmetered load.*
- (3) A reconciliation participant must not authorise the electrical connection of a point of connection in either of the following circumstances:*
 - (a) a distributor has electrically disconnected the point of connection for safety reasons, and has not subsequently approved the electrical connection of the point of connection;*
 - (b) electrically connecting the point of connection would breach the Electricity (Safety) Regulations 2010.*
- (4) No participant may electrically connect a point of connection or authorise the electrical connection of a point of connection, other than a reconciliation participant in the circumstances described in sub-clause (1), (2), or (3).*

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

Audit commentary

The connection of street light circuits was discussed. This is not a frequent occurrence, but I note that there is no notification process in place between the local authority or the trader concerned if streetlight circuits are being electrically connected and recommend that the process is reviewed to ensure that an ICP is associated with all streetlight circuits.

Recommendation	Description	Audited party comment	Remedial action
10.33A	Review streetlight circuit connection process to ensure that these are associated with an ICP prior to electrical connection.	Streetlight circuit process to be reviewed.	Identified

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

- (1) If information about an ICP provided to the registry manager in accordance with clause 7 changes, the distributor in whose network the ICP is located must give written notice to the registry manager of the change.*
- (2) The distributor must give the notice—*
 - (a) in the case of a change to the information referred to in clause 7(1)(b) (other than a change that is the result of the commissioning or decommissioning of an NSP), no later than eight business days after the change takes effect:*
 - (ab) in the case of decommissioning an ICP, by the later of—*
 - (i) three business days after the registry manager has advised the distributor under clause 11.29 that the ICP is ready to be decommissioned; and*
 - (ii) three business days after the distributor has decommissioned the ICP:*
 - (b) in every other case, no later than 3 business days after the change takes effect.*
- (3) A distributor is not required to give written notice of a change of information provided in accordance with clause 7(1)(b) if the change is for less than 14 days.*
- (4) If a change of information provided in accordance with clause 7(1)(b) is for more than 14 days, subclause (2) applies as if the change had taken effect on the 15th day after the change takes effect.*

Audit observation

The management of registry updates was reviewed.

The event detail report for 01/07/17 to 15/11/18 was reviewed to determine compliance. A diverse sample of 46 backdated events were reviewed to determine the reasons for the late updates, including the ten latest address, network, pricing, and status events.

NSP changes were examined.

Audit commentary

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

Orion went live on 1/10/18. Changes to data in Orion are automatically sent to the registry. Registry acknowledgement files are monitored, and discrepancy reporting is in place to ensure changes are processed as expected.

Address events

There were 5,071 address updates during the audit period which did not relate to initial population of data for new connections during the audit period. 53 (1%) were updated within three business days.

5,018 addresses events were late, and 2,737 of these were over 30 business days late. A sample of ten late updates over 30 business days were checked and found these all related to the data cleanse undertaken before moving to Orion. These were required to be backdated due to FCLM system interaction issues. This has no material impact on the market.

Network events

There were 209 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**). 54 (26%) of the network events were updated within three business days.

155 network events were late, and 125 of these were over 30 business days late. A sample of ten late updates over 30 business days were checked and found:

- five were due to human error prior to Orion when operators updated the registry directly and have inadvertently missed updating the event date, all updates to registry occur via Orion but the operator must select the event date;
- two were due to corrections and were correctly backdated;
- two were as a result of decommissioning, one was set up in error and the other was a decommissioned installation; backdating was required in both instances to process the decommissioning; and
- ICP 0003330318WM71B was a correction to the NSP and was backdated to 2013.

Pricing events

There were 32 pricing updates which did not relate to initial population of data for new connections during the audit period. 24 (76%) were updated within three business days.

Seven pricing updates were late, and three of these were over 30 business days late. All three late updates over 30 business days were checked and found two were changes to the loss category code and a pricing event was sent as part of a network event and no pricing change occurred.

Status events

The management of decommissioned ICPs is discussed in **section 4.11**.

There was a code change in relation to decommissioned ICPs that came into effect on 1/11/18. The distributor now has three days from the date of decommissioning or from the date the registry manager advises the ICP has moved to the “inactive - ready for decommissioning” (whichever is later) to update the ICP to decommissioned.

All decommissioned ICPs examined occurred prior to 1/11/18. 364 ICPs were decommissioned. 342 (93%) were updated within three business days of the event date.

22 statuses were updated late, and five of these were over 30 business days late. All five updates over 30 business days were checked and found that all were part of the data cleanse project still in progress. TLC are continuing to systematically work through the different regions identifying long term vacant ICPs that should be decommissioned.

NSP changes

This clause also stipulates notification requirements where the NSP supplying any ICP changes. TLC has a process for notification to the registry if required.

Review of the event detail and registry list reports found two NSP changes both were backdated as they were corrections.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.1 With: 8 of Schedule 11.1 From: 01-Jul-17 To: 15-Nov-18	Some backdated price, network, status, and address changes. Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate as the controls in place will mitigate the risk most of the time. There is a potential minor impact on settlement, hence the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Registry updates are embedded into ORION system. Many of the issues identified have been corrections of historic data issues. As identified by auditor, these corrections are ongoing.		ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

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 as at 15/11/18 was reviewed to determine compliance.

Audit commentary

NSP information is derived from TLC's asset management system, Basix. When ICPs are created in Orion, the operator will select a transformer, which is linked to the other relevant information, including NSP. The transformer identifier is provided by the network engineers based off the GIS and this is detailed on the AFS form. Validation reporting is being developed to check for any outliers.

The 2017 audit found two ICPs with potentially miss mapped NSPs. These were checked and ICP 0001111987WM0EF was corrected after the last audit. ICP 0007821410WM662 was confirmed post the audit to be on the correct NSP, so no change was required.

Each street, suburb and region combination which had ICPs assigned to more than one NSP was checked to confirm whether the NSPs were correctly assigned. I found two potentially mismapped ICPs:

- ICP 0003330318WM71B Hydro Road - likely to be connected to ONG0331 but recorded as connected to TKU0331; and
- ICP 0003301532WME55 Tokaanu Road - likely to be connected to TKU0331 but recorded as connected to NPK0331.

Both of these are being investigated. TLC has a high percentage of rural network, so it is not unusual for one ICP in a road to be connected to a different 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 3 business days after receiving a request for that information.

Audit observation

TLC bills its customers directly for line charges therefore they do receive ICP queries from customers.

Audit commentary

TLC does receive direct requests for ICP identifiers and these are provided immediately. TLC invoices customers directly and the ICP is contained on all invoices.

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 16/11/18 was reviewed to determine compliance.

Audit commentary

In Orion there is a requirement to perform a “lookup” of a proposed address entry and this will identify any duplicates. This was demonstrated during the site audit. All ICPs created during the audit period are able to be readily located and did not have duplicate addresses.

TLC’s predominantly rural network area presents some difficulty in making addresses readily locatable and there are still a number of historic ICPs that are not compliant. The list file was analysed with the following results:

	2018	2017	2016	2015	2014
Total duplicate addresses	96	255	366	1,642	1,670
Addresses with no Street number or Property name	58	260	318	636	636

TLC continues to make good progress in this area during the audit period with the number of these ICPs continuing to reduce.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: 2 Schedule 11.1 From: 01-Jul-17 To: 15-Nov-18	96 duplicate addresses exist, and 58 addresses do not have street numbers or other information to allow the ICP to be readily located. Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong as ICPs created during the audit period have addresses that are readily locatable and no duplicated addresses. The audit risk rating is low as the volume of ICPs that are not readily locatable continues to reduce year on year, therefore increasing the ability of the retailer to locate and read these ICPs.		
Actions taken to resolve the issue		Completion date	Remedial action status
Ongoing data cleansing of historical data issues		ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Further work planned for 2019Q1 to identify GPS co-ordinates for above ICPs.		2019 Q1	

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

This was examined as part of the new connection process and proof of process was checked as part of the sample of new connections examined.

Audit commentary

TLC's new connections process contains a step that ensures that any ICP can be disconnected without disconnecting any other ICP.

I note that Shared service mains are allowed as long as dedicated isolation points are provided and they were connected prior to 2002. TLC owns shared service mains. These are replaced as they are discovered.

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 management of registry information was reviewed.

The list file and metering installation details reports as at 15/11/18 were examined to check for the population of all required information and its alignment with the trader where appropriate e.g. distributed generation, unmetered load if known, and initial electrical connection dates.

A sample of ten variances were checked in relation to the initial electrical connection date and the active date.

Audit commentary

All ICP information was checked and confirmed compliant unless discussed below:

Distributed Generation

TLC require an application before any distributed generation is connected to their network. This process has been reviewed during the audit period and TLC closely monitors this area due to the health and safety risks associated.

All applications are tracked via a spreadsheet. Distributed generation is only recorded once it is confirmed that it is installed compliantly. The details are recorded in Basix (TLC asset management system) and they are also sent to the connections team who load them to Orion which then updates the registry.

As discussed in **section 2.1**, discrepancy reporting is being developed to identify any ICPs where the trader indicates distributed generation is installed by their selection of profile. Any such sites are investigated to confirm if distributed generation is present.

A check of list file found 58 ICPs have generation capacity recorded, and the generation types were consistent.

A check of the PR255 against the list file identified ICP 0001022890WM92C where the metering indicates there is an injection channel and therefore distributed generation, but TLC has none recorded. This has since been confirmed as electrically connected and the registry updated as part of the BAU process.

I checked a sample of ten ICPs with distributed generation recorded to confirm that the details were correct, and the event date aligned with the connection of the distributed generation. All were correct with the exception of:

- ICP 0001112270WMCDC which has the fuel type recorded as “other” but is a solar installation; and
- ICP 0001112461WMC32 where distributed generation was connected on 10/2/17 but the registry event for the adding of distributed generation was 30/8/17.

Initial Electrical Connection Date

This is now updated in Orion which then writes it to the registry. As detailed in **section 2.1**, discrepancy reporting is still being developed to identify missing or mismatched initial electrical connection dates.

Examination of the list file found 37 new connections which have been moved to “active” status by the trader but that have no initial electrical connection date recorded. All 37 ICPs were checked and found that 25 had occurred prior to Orion going live and were missed due to the manual process in place. The remaining 12 had occurred post Orion going live and were missed due to human error and there being no reporting in place to identify this discrepancy. This will improve once there is visibility of this via the reporting.

I checked the 217 new connections with initial electrical connection dates populated against the trader’s earliest active date and the MEP’s meter certification date. I found 32 ICPs where the initial electrical connection date was inconsistent with the earliest active date and/or the meter certification date. These were all checked, and I found the initial electrical connection date is correct for 31 ICPs. ICP 0001112847WMCE4 has the incorrect initial electrical connection date. TLC are notified by an email of the electrical connection date from FCLM but there is no paperwork attached to support the date advised. I recommend that the livening paperwork is used to determine the electrical connection date.

Recommendation	Description	Audited party comment	Remedial action
7(1) of schedule 11.1	Livening paperwork is provided to support electrical connection dates advised from FCLM.	Review planned of new connection process and end to end workflow.	Identified

ICP Designation

The list file was checked and found 778 ICPs indicated as having a dedicated NSP. All ICPs on the TLC network can be fed by more than one NSP and therefore they should all be recorded as not dedicated. TLC will correct this and will notify the trader on the ICPs affected prior to correcting. All new ICPs are created with the non-dedicated flag.

Unmetered Load

There have been no new connections with unmetered load associated created during the audit period.

Of the 85 active ICPs with unmetered load recorded by the trader, 63 ICPs have no unmetered load detailed. These are all historical.

The load was compared for the 18 ICPs where the unmetered load has been populated in the recommended format and found to match the trader's unmetered load figure within ± 0.00 kWh.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.6 With: 7(1) of Schedule 11.1 From: 01-Jul-17 To: 15-Nov-18	Incorrect ICP designation flag for 778 ICPs 37 active ICPs with no initial electrical connection dates recorded. One incorrect initial electrical connection date. 2 ICPs with incorrect distributed generation details (one incorrect fuel type and one with the incorrect event date) Potential impact: Low Actual impact: Low Audit history: Multiple Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as weak as the reporting to monitor this area is still to be deployed but is expected to be in place shortly. The audit risk rating is low as the volume of ICPs affected by the incorrect NSP flag is low and the missing IECD date has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
Correction of identified non compliance		2019 Q1	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ORION project includes in its deliverables a reporting suite which provides validation of Network fields on the registry. These reports will be reviewed and actioned on a monthly basis once available.		2019 Q1	

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 and the new connection process were reviewed.
The event detail report for 01/07/17 to 15/11/18 was reviewed to determine compliance.

Audit commentary

TLC bill their customers directly, so the price category is the same for all ICPs and is in effect a placeholder.

Review of the event detail report confirmed that all electrically connected new connections had pricing information provided on time in accordance with this clause.

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 15/11/18 was reviewed to identify any ICPs with GPS coordinates populated.

Audit commentary

GPS coordinates were not populated for any ICP.

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 of ICPs in relation to the use of the “ready” status was examined. The list file and event detail report for the period from 01/07/17 to 15/11/18 were examined in relation to the use of the “ready” status.

Audit commentary

TLC’s new connections process includes a “trader responsibility” step. Each ICP has a single price category, as TLC only has one price category.

TLC continues to use a tracking spreadsheet to manage ICPs that have been at “ready” status for more than 24 months until the reporting is fully deployed in the Orion system. This is expected to be in place imminently. One ICP was found to be at “ready” for more than 24 months.

ICP	Proposed Trader	Creation Date	ICP Status
0001112504WM789	TRUS	4/11/2016	000

This was examined during the site audit and has been managed via TLC’s existing process. It has since been confirmed with the trader to no longer be required and has been “Decommissioned - set up in error”.

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 of ICPs in relation to the use of the “distributor” status was examined. The list file and event detail report for the period from 01/07/17 to 15/11/18 were examined in relation to the use of the “distributor” status.

Audit commentary

Analysis of the registry list confirmed that no ICPs are at “distributor” status. There are no embedded networks or shared unmetered load connections on TLC’s network. TCL does not intend to allow any new shared unmetered load ICPs.

The potential shared unmetered load that was identified as a result of streetlight audits, has been investigated and in the process of being resolved for all but two items of load that are still being investigated. The items of load are either being added to the Waitomo District Councils database or as standard unmetered load to the lights benefactor, therefore there have been no ICPs created during the audit period with the “Distributor” status. The specific items of load are discussed in detail in **section 7.1**.

Audit outcome

Compliant

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

Code reference

Clause 20 Schedule 11.1

Code related audit information

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

Decommissioning only occurs when:

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

Audit observation

The decommissioning process was discussed.

The event detail report and registry list were reviewed to identify ICPs at decommissioned status. An extreme case sample of 10 ICPs ready for decommissioning since prior to 2017 were checked, and typical sample of 10 decommissioned ICPs were checked.

Audit commentary

TLC’s ICP decommissioning processes requires a request to be made either directly to approved contractors, or to TLC via either the database or asset teams. If via approved contractors, they must provide notification to TLC. TLC then confirms the ICP ownership and gains permission prior to decommissioning. TLC’s policy is to change the status only upon receipt of the appropriate paperwork. This includes confirmation that metering has been removed. All status updates now write from Orion to the registry. This was not always occurring with the previous Gentrack system resulting in manual updates directly to the registry to be completed by the operator.

TLC are making good progress with the data cleanse project to clean-up all of the ICPS that are long term vacant disconnected. These continue to be worked through region by region.

10 decommissioned ICPs were checked and found that they had all been correctly decommissioned, but that event date didn’t match to the date of decommissioning for two of these ICPS. This was prior to Orion being used and were due to human error. This is recorded as non-compliance in **section 2.1**.

There are 42 ICPs with a status of “ready for decommissioning”. The number of ICPs at the pending status continues to decline. The sample checked found all were being managed via the BAU process and were at the correct status.

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

TLC is unique concerning the management of price category codes, in that they invoice customers directly and therefore only have one price category code, which is “CDB” or “customer direct billed”. There have been no new price category codes created 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

TLC has not created any new loss factors 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

TLC has not changed any loss factors 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 on the registry was examined.

Audit commentary

No NSPs were created or decommissioned during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

The request must be made at least 10 business days before the NSP is electrically connected, in respect of an NSP that is an interconnection point between 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 and the registry list were examined.

Audit commentary

No NSPs were created or decommissioned during the audit period.
There were no NSP changes lasting for more than 10 business days.

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

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

Audit outcome

Compliant

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

If a participant notifies the creation of an NSP, or the transfer of an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor, the distributor must 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 on the registry was examined.

Audit commentary

No new embedded network NSPs were created 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 on the registry was examined.

Audit commentary

No balancing areas were changed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 27 Schedule 11.1

Code related audit information

If a transfer of an ICP results in an ICP becoming an NSP at which an embedded network connects to a network, or in an ICP becoming an NSP that is an interconnection point, in respect of the distributor's network, the distributor must 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 on the registry was examined.

Audit commentary

TLC has not had any ICPs that have changed to become an NSP 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 3 business days before the transfer takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

TLC 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 and evidence of all updates made to the Reconciliation Manager via the portal.

Audit commentary

The NSP supply point table was reviewed:

Distributor	NSP POC	Description	MEP	Certification Expiry
LINE	ATI0111	ATIAMURI	MRPL	07/02/2021
LINE	MEP0112	MOKAI	FCLM	16/02/2022
LINE	MEP0113	MOKAI	FCLM	16/02/2022
LINE	WKM0331	WHAKAMARU	FCLM	17/10/2019

The NSP metering was recertified during the audit period for ATI0111. This site was recertified on 7/2/18 but wasn't notified to the Reconciliation Manager until 16/4/18. This is not within the required 20 business days of this occurring.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 6.8 With: 10.25(1) and 10.25(3) From: 02-Mar-18 To: 16-Apr-18	Meter certification not notified within 20 business days of recertification. Potential impact: None Actual impact: None Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	I have rated the controls as moderate as this is managed by the reconciliation participant on behalf of TLC. The audit risk rating is low this non-compliance has no direct impact on reconciliation.		
Actions taken to resolve the issue		Completion date	Remedial action status
Since audit, TLC has been in contact with agent to discuss non-compliance and possible future mitigation.		n/a	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
Agent has advised that certification process makes it difficult to guarantee 20 BD compliance. TLC note that the code change from 10 days to 20 will mitigate this issue		n/a	

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

Code reference

Clause 10.25(2)

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No new NSPs were created 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 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 table on the registry was examined.

Audit commentary

TLC 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

No MEP changes occurred for embedded network gate meters 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

TLC 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

TLC 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 15/11/18 was reviewed to identify all ICPs with shared unmetered load. Streetlight audits of the network were assessed.

Audit commentary

TLC has no existing shared unmetered load.

TLC has made good progress in relation to the 18 items of potential shared unmetered load that were identified as a result of streetlight audits as detailed below:

- a new standard unmetered load ICP is being created for the eight lights associated with trust owned flats in Kaka Street, this ICP will be paid for by the trust;
- three lights are being added to the Waitomo Caves Hotel ICP as standard unmetered load;
- two lights are associated with the local Marae and are expected to be converted to solar power;
- two lights are being added to the Waitomo DC RAMM database;
- two lights – one at Rauparaha Street, Te Anga and the other at Pukehinau Street, Waimarino were still being investigated at the time of this audit; and
- one light has been determined to belong to NZTA and TLC are liaising with the trader associated with this ICP to get it added to the NZTA RAMM database.

I confirmed that there were no other points of connection without an ICP or shared unmetered ICP recorded. Non-compliance is recorded in **section 3.1** for not having an ICP created for all points of connection.

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 15/11/18 was reviewed to identify all changes to shared unmetered load.

Audit commentary

Review of the registry list confirmed that no ICPs have shared unmetered load recorded, and there have been no changes to shared unmetered load information.

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

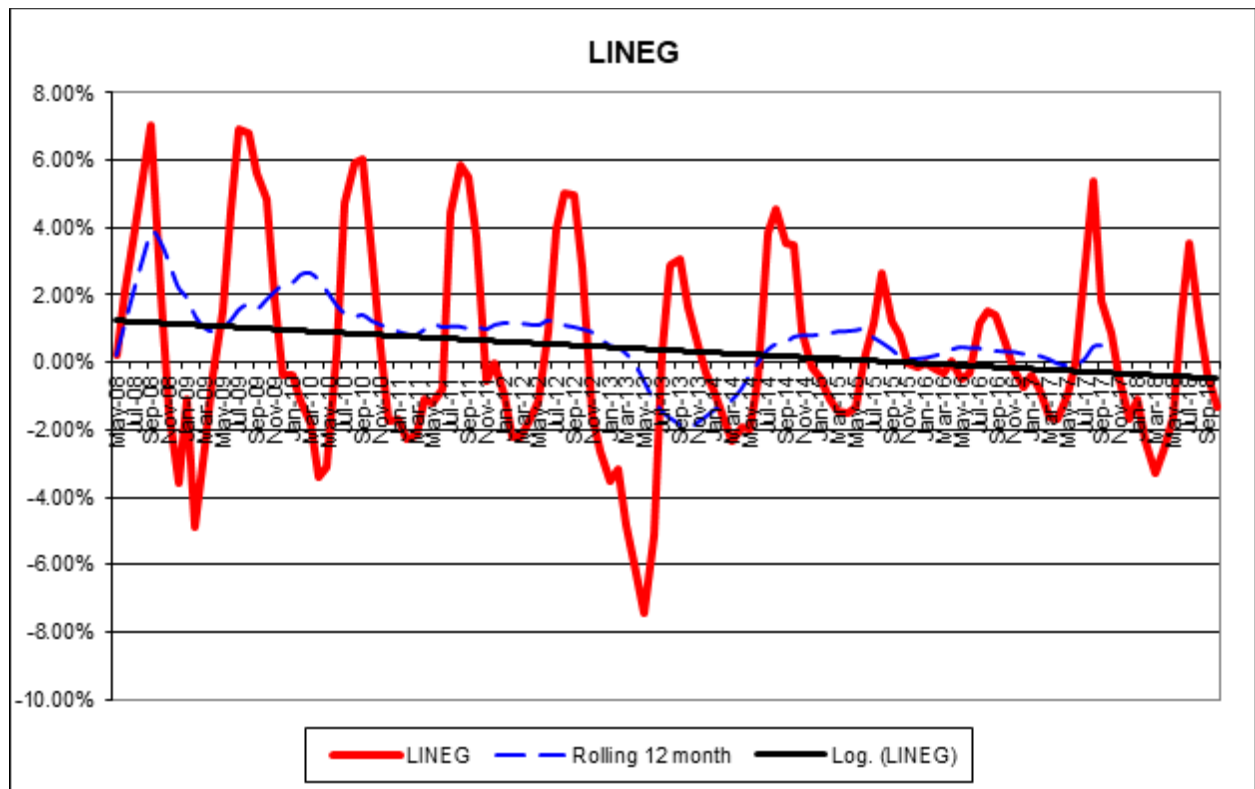
The “Guidelines on the calculation and the use of loss factors for reconciliation purposes” was published on 26 June 2018. I have assessed TLC’s process and compliance against the guideline’s recommended thresholds.

TLC’s Network Performance Engineer provided a summary outlining the loss factor review process.

Audit commentary

Loss factor reviews have until this point been conducted every ten years, or if a major change to the network occurs which is likely to have a material impact on loss factors. TLCs loss factors were last updated in April 2008. TLC are reviewing the loss factor guidelines published in June 2018. They intend to adopt this methodology and with the consumption data available from Orion they will be reviewing the loss factors and intend to undertake this exercise on an annual basis.

I was provided by the Electricity Authority the reconciliation losses by for the Lines Company network. The chart below indicates losses for the network are tracking within the +/- 1% threshold indicated in the guideline.



Audit outcome

Compliant

CONCLUSION

TLC moved from Gentrack to the Orion platform on October 1st, 2018. A material change audit was undertaken by Steve Woods of Veritek prior to this change. I have reviewed that audit as part of this audit. This audit covers the period when Gentrack was still in use. When describing processes, I have described the current processes used in Orion.

The new system is performing well and has greatly improved TLC's interaction with the registry. Registry validation has been put in place. This is sitting with the project team until all validations have been fully developed and put in place. The full benefit of the new Orion system cannot be seen in this audit as it has only been in place for six weeks, however I am confident having seen the system in operation that it should perform the required functions as expected.

The loss factor guidelines published in June 2018, are being reviewed and TLC intend to adopt the methodology and put in place a process to undertake loss factor reviews on a regular basis.

This audit found 11 areas of non-compliance and makes three recommendations. The next audit frequency table indicates that the next audit be due in six months. I have considered this result in conjunction with the fact that much of the audit period covered relates to the Gentrack system and the responses from TLC and I recommend that the next audit be due in 12 months.

PARTICIPANT RESPONSE

Veritek's audit process has provided an excellent framework for the compliance team during our recent system upgrades. We are very pleased with the improvements identified in the audit as they represent the culmination of many months of dedication by the ORION project team and seconded internal teams.

As part of its business improvement programme TLC is undertaking a review of key business processes, these include new connections, unmetered load and decommissioning of ICPs. We believe that the recommendations in this report, coupled with the business process review and the finalisation and handover of the Orion system will provide material improvement to our registry related processes.