

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

**THE LINES COMPANY LIMITED
AXOS MATERIAL CHANGE AUDIT
NZBN: 9429038879517**

Prepared by: Tara Gannon

Date audit commenced: 26 August 2021

Date audit report completed: 21 September 2021

TABLE OF CONTENTS

Executive summary	4
Audit summary	5
Non-compliances	5
Recommendations	5
Issues	5
1. Administrative	6
1.1. Exemptions from Obligations to Comply with Code (Section 11)	6
1.2. Structure of Organisation	7
1.3. Persons involved in this audit	9
1.4. Use of contractors (Clause 11.2A)	9
1.5. Supplier list	9
1.6. Hardware and Software	10
1.7. Breaches or Breach Allegations	11
1.8. ICP and NSP Data	11
1.9. Authorisation Received	12
1.10. Scope of Audit	12
1.11. Summary of previous audit	14
2. Operational Infrastructure	17
2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1)) ..	17
2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2))	18
2.3. Removal or breakage of seals (Clause 48(1A) and 48(1B) of Schedule 10.7)	19
2.4. Provision of information on dispute resolution scheme (Clause 11.30A)	19
3. Creation of ICPs	21
3.1. Distributors must create ICPs (Clause 11.4)	21
3.2. Participants may request distributors to create ICPs (Clause 11.5(3))	21
3.3. Provision of ICP Information to the registry manager (Clause 11.7)	22
3.4. Timeliness of Provision of ICP Information to the registry manager (Clause 7(2) of Schedule 11.1)	23
3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1)	23
3.6. Connection of ICP that is not an NSP (Clause 11.17)	24
3.7. Connection of ICP that is not an NSP (Clause 10.31)	24
3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)	25
3.9. Connection of NSP that is not point of connection to grid (Clause 10.30)	26
3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A))	26
3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1)	27
3.12. Loss category (Clause 6 Schedule 11.1)	27
3.13. Management of “new” status (Clause 13 Schedule 11.1)	28
3.14. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1)	28
3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1)	29
3.16. Electrical connection of a point of connection (Clause 10.33A)	29
3.17. Electrical disconnection of a point of connection (Clause 10.30C and 10.31C)	30
3.18. Meter bridging (Clause 10.33C)	30
4. Maintenance of registry information	32

4.1.	Changes to registry information (Clause 8 Schedule 11.1)	32
4.2.	Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)	33
4.3.	Customer queries about ICP (Clause 11.31).....	34
4.4.	ICP location address (Clause 2 Schedule 11.1).....	34
4.5.	Electrically disconnecting an ICP (Clause 3 Schedule 11.1).....	35
4.6.	Distributors to Provide ICP Information to the Registry manager (Clause 7(1) Schedule 11.1)	35
4.7.	Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)	38
4.8.	GPS coordinates (Clause 7(8) and (9) Schedule 11.1)	38
4.9.	Management of “ready” status (Clause 14 Schedule 11.1)	39
4.10.	Management of “distributor” status (Clause 16 Schedule 11.1)	40
4.11.	Management of “decommissioned” status (Clause 20 Schedule 11.1)	40
4.12.	Maintenance of price category codes (Clause 23 Schedule 11.1).....	41
5.	Creation and maintenance of loss factors	42
5.1.	Updating table of loss category codes (Clause 21 Schedule 11.1).....	42
5.2.	Updating loss factors (Clause 22 Schedule 11.1)	42
6.	Creation and maintenance of NSPs (including decommissioning of NSPs and transfer of ICPs).....	43
6.1.	Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1).....	43
6.2.	Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)	43
6.3.	Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)	44
6.4.	Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)	44
6.5.	Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)	45
6.6.	Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)	45
6.7.	Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)	46
6.8.	Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3))	46
6.9.	Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2)).....	47
6.10.	Obligations concerning change in network owner (Clause 29 Schedule 11.1)	47
6.11.	Change of MEP for embedded network gate meter (Clause 10.22(1)(b))	48
6.12.	Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)	49
6.13.	Transfer of ICPs for embedded network (Clause 6 Schedule 11.2).....	49
7.	Maintenance of shared unmetered load	50
7.1.	Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))	50
7.2.	Changes to shared unmetered load (Clause 11.14(5)).....	51
8.	Calculation of loss factors	53
8.1.	Creation of loss factors (Clause 11.2).....	53
	Conclusion	54
	Participant response	54

EXECUTIVE SUMMARY

The **Lines Company Limited (TLC)** intends to migrate from the Orion system to Axos effective from 1 October 2021.

Currently, registry information is maintained within Orion and automatically transferred to and from the registry. Orion discrepancy reports are used to validate registry information.

From 1 October 2021:

- Axos' registry manager will be used to maintain ICP information, and transfer data to and from the registry, and
- Axos' billing will use registry event, retailer EIEP1, and account information to produce retailer invoices, the migration to Axos will coincide with a change from end-consumer billing to retailer billing (the billing process itself is outside the scope of this audit).

Clause 8(1) of Schedule 15.1 requires that if a distributor intends to make a "material" change to any certified facilities, processes, or procedures then the changes must be subject to an audit prior to the change taking place. This audit was therefore performed at the request of TLC so that it can be supplied to the Electricity Authority to satisfy the requirements of Clause 8(1). The audit was conducted in accordance with the Guideline for Distributor Audits V7.2.

Compliance was assessed for all areas which could be impacted by the material change.

The registry synchronisation process will help to ensure that current values recorded in Axos match the registry, and unsuccessful updates will be identified and resolved through the synchronisation process.

It is possible for events to be deleted prior to synchronisation, which could result in mismatch. Because only the most recent registry event can be reversed through Axos, older event reversals may need to be processed on the registry which could also cause mismatch. It would be prudent to ensure that registry data is matched to Axos at least weekly, and TLC intends to set up a datawarehouse which exception reporting can be generated from.

There are currently no checks to validate initial electrical connection dates and generation details against MEP and trader data, or checks for existing duplicate and incomplete addresses. I recommend that the registry AC020 reports are reviewed, and any discrepancies are investigated and corrected.

The matters raised are set out in the table below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
			Nil				
Future Risk Rating						0	

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
Requirement to provide complete and accurate information	2.1	Registry – Axos validation	Validate data in fields held in Axos against the registry at least weekly, and investigate and resolve any discrepancies.
Requirement to provide complete and accurate information	2.1	Data consistency	<p>Review the registry AC020 audit compliance reports at least monthly to identify potentially inaccurate information which requires investigation and correction.</p> <p>This check includes potentially inaccurate NSPs, duplicate and incomplete addresses, active ICPs without initial electrical connection dates, ICPs with initial electrical connection dates which are not active, initial electrical connection dates inconsistent with meter certification and/or active dates, and distributed generation discrepancies.</p>
Distributors to Provide ICP Information to the Registry manager	4.6	Investigate ICPs where distributed generation is indicated, but an application has not been received.	<p>At least monthly, compare ICPs which have an EG1 or PV1 profile on the registry list to the list of ICPs which distributed generation applications have been received for.</p> <p>It may also be helpful to cross check to the MEP's meter channel records to determine whether injection registers are installed, and the high risk database may also contain information on generation installation (https://www.energysafety.govt.nz/energysafety/app/highrisk-db/home).</p> <p>Follow up with the trader and/or customer to determine whether generation is installed.</p>

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

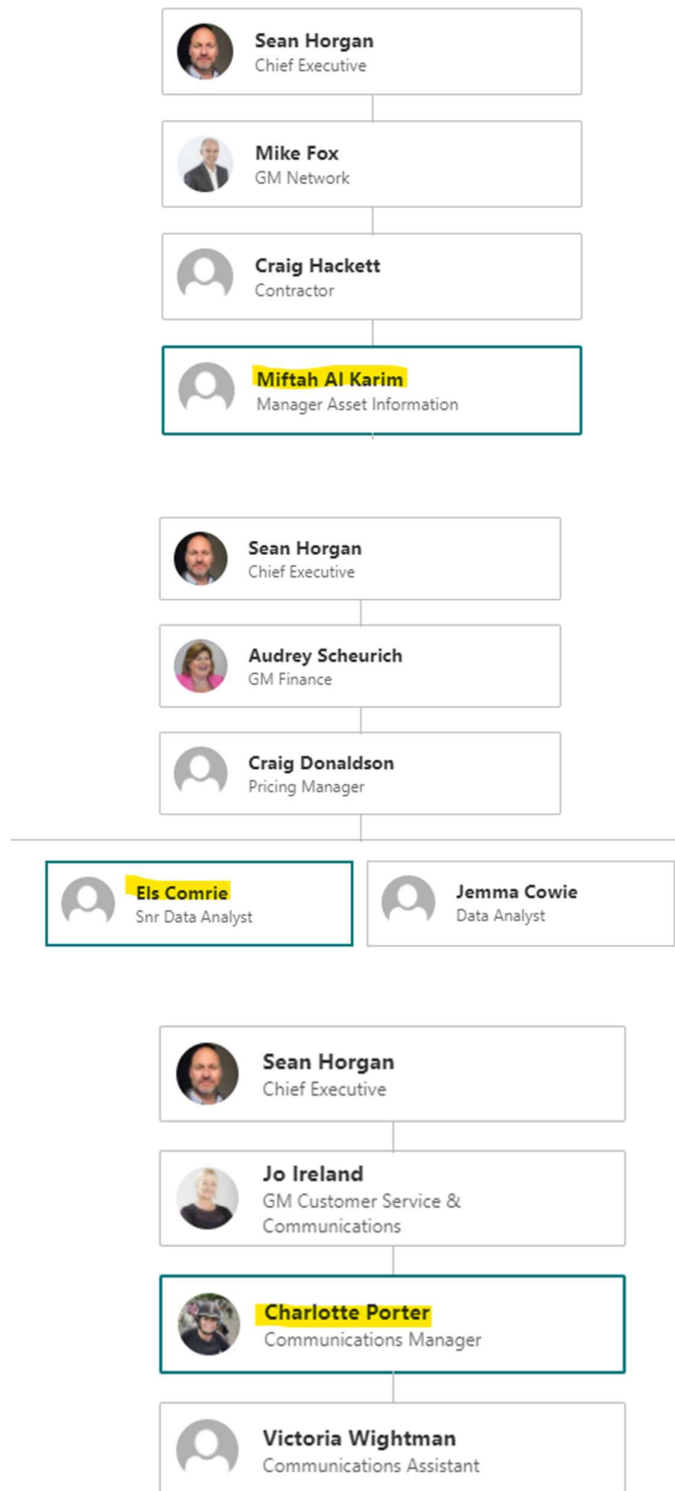
The Authority website was checked to determine whether there are code exemptions in place.

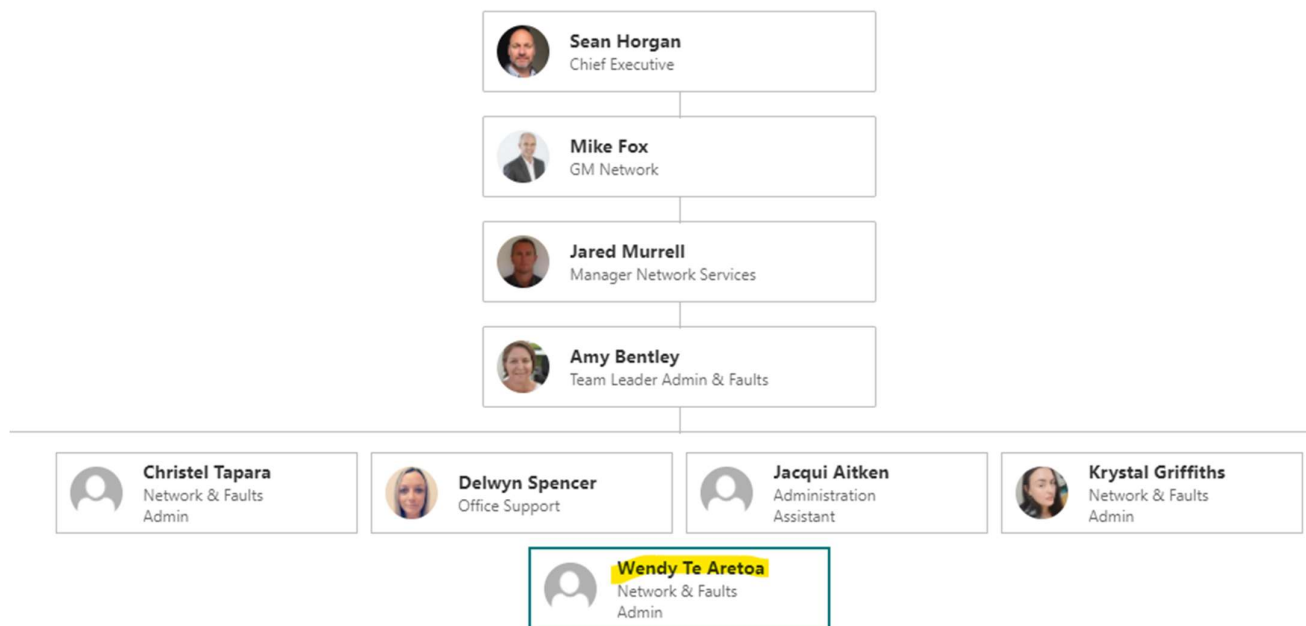
Audit commentary

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:





1.3. Persons involved in this audit

Auditor:

Tara Gannon

Veritek Limited

Electricity Authority Approved Auditor

Personnel assisting in this audit were:

Name	Title	Organisation
Craig Donaldson	Pricing Manager	The Lines Company
Els Comrie	Senior Data Analyst	The Lines Company
June MacRae	GIS Administrator	The Lines Company
Nisheel Hirani	Network Performance Engineer	The Lines Company
Wendy Te Aretoa	Network & Faults Administrator	The Lines Company

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

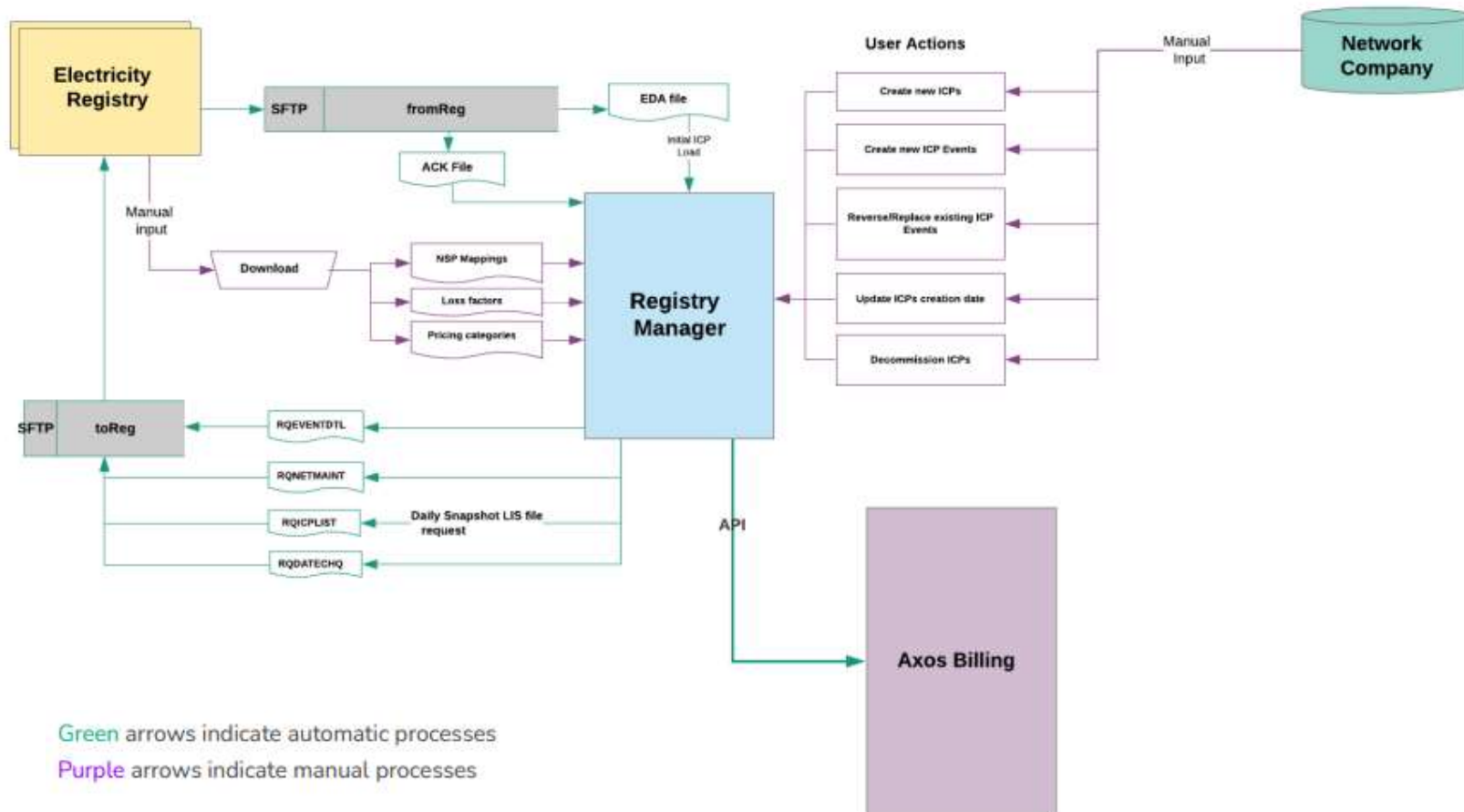
Not applicable

1.5. Supplier list

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

1.6. Hardware and Software

TLC provided the diagram below showing the integration of the Axos Registry Manager system with other systems and processes:



Axos backups are created each morning and retained for 45 days.

Access to TLC's systems is restricted through individual logins and passwords. An audit trail of user actions is kept within Axos.

Basix is TLC's asset management system. NSP information held in Basix is manually updated in Axos.

1.7. Breaches or Breach Allegations

The Authority did not record any breaches relevant to the scope of this audit.

1.8. ICP and NSP Data

The table below lists the relevant NSPs, and their associated balancing areas. Active ICP numbers are as of 26 August 2021.

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	11,553
LINE	HTI1101	HANGATIKI			NORTHLINEG	G	25/2/19	-
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	832
LINE	OKN0111	OHAKUNE			OKN0111LINEG	G	1/05/08	2,081
LINE	ONG0331	ONGARUE			CENTRALLINEG	G	1/05/08	4,484
LINE	TKU0331	TOKAANU			CENTRALLINEG	G	1/05/08	4,909
LINE	TLC0111	TANGIWAI OHAKUNE INTERCONNECT	OKN0111	LINE	OKN0111LINEG	I	01/07/19	-
LINE	WKM0331	WHAKAMARU	HTI0331	LINE	NORTHLINEG	I	1/05/08	-

A summary of TLC's ICPs by status is shown in the table below:

Status	Number of ICPs 2021	Number of ICPs 2020	Number of ICPs 2019	Number of ICPs 2018	Number of ICPs 2017	Number of ICPs 2016	Number of ICPs 2015
Distributor (888)	0	0	0	0	0	0	0
New (999)	0	1	3	1	0	0	0
Ready (000)	19	21	13	26	8	9	7

Active (2,0)	23,859	23,649	23,593	23,596	23,501	23,311	23,766
Inactive - new connection in progress (1,12)	35	45	44	37	34	28	25
Inactive – vacant (1,4)	267	308	298	295	435	752	909
Inactive - reconciled elsewhere (1,5)	0	0	0	0	1	0	0
Inactive – AMI remote disconnection (1,7)	25	4	3	0	1	0	1
Inactive – disconnected due to meter disconnected (1,8)	33	38	41	64	50	38	104
Inactive – at pole fuse (1,9)	1	4	2	2	1	1	0
Inactive – disconnected at meter box switch (1,10)	0	0	0	1	0	0	0
Inactive - at meter box switch (1,11)	2	2	3	5	9	57	415
Inactive – ready for decommissioning (1,6)	8	8	5	42	76	52	67
Decommissioned (3)	3,663	3,546	3,465	3,175	2,832	2,502	2,269

1.9. Authorisation Received

TLC provided a letter of authorisation to Veritek.

1.10. Scope of Audit

The Lines Company Limited (TLC) intends to migrate from the Orion system to Axos effective from 1 October 2021.

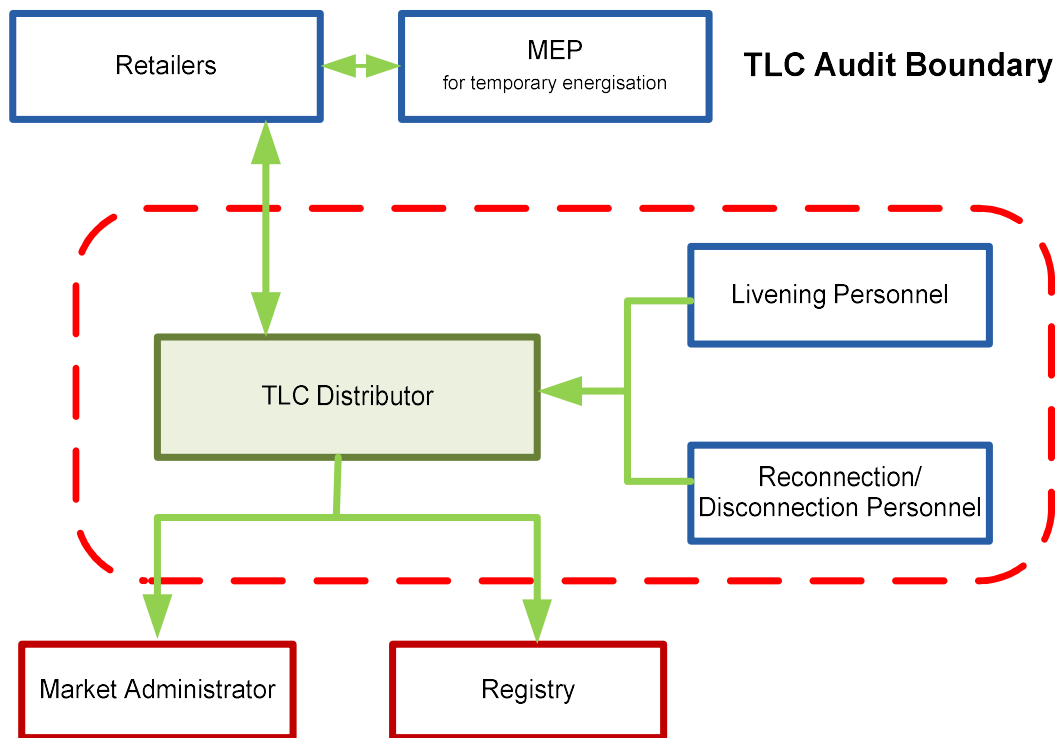
Currently, registry information is maintained within Orion and automatically transferred to and from the registry. Orion discrepancy reports are used to validate registry information.

From 1 October 2021:

- Axos’ registry manager will be used to maintain ICP information, and transfer data to and from the registry, and
- Axos’ billing will use registry event, retailer EIEP1, and account information to produce retailer invoices, the migration to Axos will coincide with a change from end-consumer billing to retailer billing (the billing process itself is outside the scope of this audit).

Clause 8(1) of Schedule 15.1 requires that if a distributor intends to make a “material” change to any certified facilities, processes, or procedures then the changes must be subject to an audit prior to the change taking place. This audit was therefore performed at the request of TLC so that it can be supplied to the Electricity Authority to satisfy the requirements of Clause 8(1). The audit was conducted in accordance with the Guideline for Distributor Audits V7.2.

Compliance was assessed for all areas which could be impacted by the material change.



1.11. Summary of previous audit

TLC provided a copy of their previous audit conducted in November 2021 by Tara Gannon of Veritek Limited. The audit recorded seven non-compliances described in the table below and made four recommendations. The current status of the non-compliances and recommendations is listed below.

Subject	Section	Clause	Non-compliance	Status
Requirement to provide complete and accurate information	2.1	11.2(1)	<p>One pricing event and one network event had incorrect event dates, and were corrected during the audit.</p> <p>Seven ICPs had incorrect initial electrical connection dates, and were corrected during the audit.</p> <p>ICP 0001113309WMF74 had its chargeable capacity for pricing recorded in the generation capacity field due to a data entry error, and was corrected during the audit.</p> <p>Distributed generation updates for ICPs 0004050770WM132, 0001120420WM0BE, 0001062900WM45A, and 0001112481WM688 had their generation capacity rounded to the nearest kW. Backdated corrections to the capacities were processed during the audit.</p> <p>Alleged breach 2008LINE1 was recorded for incorrect dedicated NSP information. All affected ICPs have had their dedicated NSP status corrected.</p>	Cleared.
Distributors must create ICPs	3.1	11.4	ICPs are not created for ten unmetered streetlights.	Cleared.
Participants may request distributors to create ICPs	3.2	11.5(3)	Four ICPs were not created within three business days of a request from a trader, and the reasons for the late update were not provided to the trader.	The material change is not expected to decrease future compliance.
Timeliness of Provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	Late population of the initial electrical connection dates for 27 ICPs.	The material change is not expected to decrease future compliance.
Changes to registry information	4.1	8 Schedule 11.1	<p>97 late address updates.</p> <p>812 late updates to dedicated NSP status.</p> <p>14 late updates to other network fields, excluding initial updates to initial electrical connection dates.</p> <p>44 late updates to decommissioned status.</p>	The material change is not expected to decrease future compliance.

Subject	Section	Clause	Non-compliance	Status
ICP location address	4.4	2 Schedule 11.1	<p>88 ICPs had incomplete or duplicate address information; 85 were corrected during the audit, one relates to DUMML load, and two are under investigation.</p> <p>Nine ICPs had some incorrect address information, which was corrected during the audit.</p>	The material change is not expected to decrease future compliance.
Distributors to Provide ICP Information to the Registry man	4.6	7(1) Schedule 11.1	<p>The pricing update for ICP 0001113191WM880 had an incorrect event date; it was processed effective from the update date in error. The event date was corrected during the audit.</p> <p>ICP 0001113309WMF74 had its chargeable capacity for pricing recorded in the generation capacity field due to a data entry error, and was corrected during the audit.</p> <p>At least seven ICPs had incorrect initial electrical connection dates, which were corrected during the audit.</p> <p>Distributed generation updates for ICPs 0004050770WM132, 0001120420WM0BE, 0001062900WM45A, and 0001112481WM688 had their generation capacity rounded to the nearest kW. Backdated corrections to the capacities were processed during the audit.</p>	Cleared

Subject	Section	Recommendation	Description	Status
ICP location address	4.4	Review the accuracy of address and NSP information	<p>To identify ICPs with incorrect addresses and/or NSPs assigned:</p> <ol style="list-style-type: none"> 1. Regularly review the registry audit compliance report AC020Distributor10 to identify ICPs where the NSP assigned differs from the expected value for the street. 2. Use a registry snapshot report to identify ICPs connected to NSPs where less than 50% of the ICPs in that town are connected to that NSP. <p>Investigate any discrepancies to determine whether the address and NSP assigned are correct.</p>	Not adopted, re-raised in section 2.1 .

Subject	Section	Recommendation	Description	Status
Distributors to Provide ICP Information to the Registry man	4.6	Validation of initial electrical connection dates	<p>Validate initial electrical connection dates against the trader's earliest active date and the MEP's meter certification date, to identify discrepancies which may require investigation and correction.</p> <p>The registry audit compliance report could be used to identify discrepancies.</p>	Not adopted, re-raised in section 2.1 .
Distributors to Provide ICP Information to the Registry man	4.6	Investigate ICPs where distributed generation is indicated, but an application has not been received.	<p>At least monthly, compare ICPs which have an EG1 or PV1 profile on the registry list to the list of ICPs which distributed generation applications have been received for.</p> <p>It may also be helpful to cross check to the MEP's meter channel records to determine whether injection registers are installed, and the high risk database may also contain information on generation installation.</p> <p>Follow up with the trader and/or customer to determine whether generation is installed.</p>	Not adopted, re-raised in section 4.6 .
Management of "decommissioned" status	4.11	ICPs at 1,6 (inactive ready for decommissioning) status where the customer has indicated the ICP should not be decommissioned	<p>Query the status of ICPs 0001017920WM496 and 0005820970WM048 with Trustpower.</p> <p>0001017920WM496 still has the trader listed as KING, and was potentially not switched to Trustpower because it was expected to be decommissioned.</p>	Adopted.

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 11.2(1) and 10.6(1)

Code related audit information

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

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

Audit observation

I considered whether the migration to Axos was likely to result in incorrect or misleading information. I viewed process documentation and test results.

Audit commentary

Registry synchronisation

ICP status, address, network, and pricing information is maintained in Axos. Each event type has an event date field, which defaults to today's date and can be modified.

Axos validates the data to ensure that it meets the registry's requirements for registry fields, and drop down boxes are used to restrict values where practical. There are some system controls over data consistency, for example:

- generation capacity and fuel type can only be populated if the installation type is B or G,
- initial electrical connection dates cannot be future dated, and
- if GPS northing or easting is populated, the other must also be populated.

Axos will automatically update the registry for all distributor maintained events, and can also process event reversals and replacements. Synchronisation automatically occurs every five minutes unless it is manually triggered.

Axos retrieves registry acknowledgement files every five minutes. The files are reviewed in the registry manager to identify successful and failed updates, and failed updates will be investigated.

Registry events are updated in Axos daily. A synchronisation is completed each day to capture registry data updates within the last seven days.

Registry and data validation

The registry synchronisation process will help to ensure that current values recorded in Axos match the registry. Unsuccessful updates will be identified and resolved through the synchronisation process.

It is possible for events to be deleted prior to synchronisation, which could result in mismatch. Because only the most recent registry event can be reversed through Axos, older event reversals may need to be processed on the registry which could also cause mismatch. It would be prudent to ensure that registry data is matched to Axos at least weekly, and TLC intends to set up a datawarehouse which exception reporting can be generated from.

There are currently no checks to validate initial electrical connection dates and generation details against MEP and trader data, or checks for existing duplicate and incomplete addresses. I recommend that the registry AC020 reports are reviewed, and any discrepancies are investigated and corrected.

Recommendation	Description	Audited party comment	Remedial action
Registry – Axos validation	Validate data in fields held in Axos against the registry at least weekly, and investigate and resolve any discrepancies.	Will adopt the recommendation in September 2021	Identified
Data consistency	<p>Review the registry AC020 audit compliance reports at least monthly to identify potentially inaccurate information which requires investigation and correction.</p> <p>This check includes potentially inaccurate NSPs, duplicate and incomplete addresses, active ICPs without initial electrical connection dates, ICPs with initial electrical connection dates which are not active, initial electrical connection dates inconsistent with meter certification and/or active dates, and distributed generation discrepancies.</p>	Will adopt the recommendation in September 2021	Identified

Audit outcome

Compliant

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

Code reference

Clause 11.2(2) and 10.6(2)

Code related audit information

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

Audit observation

Processes to provide information were reviewed. I considered whether the migration to Axos was likely to result in incorrect or misleading information.

Audit commentary

Timeliness of corrections depends on people and processes and will be checked during the first audit after go-live.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

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

Audit observation

Processes for removal or breakage of seals were reviewed.

Audit commentary

Only qualified personnel complete work on meters including removal or breakage of seals. Meters are required to be re-sealed once work is complete, and TLC advises the meter owner.

Audit outcome

Compliant

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

Code reference

Clause 11.30A

Code related audit information

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

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

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

Audit observation

The process to ensure that information on Utilities Disputes is provided to customers was discussed. TLC's website, email footers, and Utilities Disputes Messaging documentation was reviewed.

Audit commentary

Information on Utilities Disputes is provided:

- as part of the customer services script when responding to inbound calls, and in person enquiries at TLC's office,
- as a written response to facebook direct messages,
- as part of the email signature for emails,
- on outbound communications regarding pricing,
- on TLC's website, and
- on outbound communications regarding service and service changes, including planned outages, and maintenance.

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 process to create ICPs using Axos was checked. I viewed process documentation and test results.

Audit commentary

ICPs will be created in Axos, and the user will be able to populate address, and network event information at the same time. There are controls over fields to ensure that they are consistent and meet the registry requirements.

Once the required fields are populated the user selects the “up sync” button to send the events to the registry, which creates the ICP with “new” status.

Once the event acknowledgements have been received by Axos the user can create a distributor pricing event. Once this pricing event has been sent and accepted by the registry, the status will be updated to “ready”.

The previous audit recorded non-compliance for a small number of unmetered streetlights which were not associated with a DUML ICP, and did not have an unmetered load ICP created. The affected lights now have standard unmetered load created.

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

The distributor, within 3 business days of receiving a request for the creation of an ICP identifier for an ICP, must either create a new ICP identifier or advise the participant of the reasons it is unable to comply with the request.

Audit observation

The new connection process was examined, and I found that the migration to Axos is unlikely to affect future compliance.

Audit commentary

The new connection application process will not change as part of this material change. New connection data will be entered into Axos and transferred to the registry, instead of from Orion.

1. An application for new load (AFL) is provided to TLC by the customer, the customer's agent, or the trader.
2. The AFL is approved or declined.
3. If the AFL is approved, TLC sends a "Connection Agreement" to the customer, which is completed and returned. The customer is advised to register with a trader if they have not done so already.
4. A request for approval is sent to the proposed trader indicated by the customer.
5. The ICP is created in Axos and data is transferred to the registry.
6. Once the proposed trader has confirmed acceptance and requested liveness, TLC schedules the connection to be completed.

If an ICP cannot be created on request because not all the requested information is provided, the trader and/or customer will be advised via email of the reasons for the delay.

The process ensures that ICPs are created on time, but will not be lived without the trader's approval. Copies of all documents are scanned and filed on TLC's network.

The timeliness of ICP creation will be assessed in the first audit following implementation of the material change.

Audit outcome

Compliant

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

Code reference

Clause 11.7

Code related audit information

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

Audit observation

The process to provide ICP information using Axos was checked. I viewed process documentation and test results.

Audit commentary

The new connection application process will not change. TLC receives new connection requests from customers or their agents, and a service request from the retailer confirming their trader acceptance.

ICPs will be created in Axos, and the user will be able to populate address, and network event information at the same time. There are controls over fields to ensure that they are consistent and meet the registry requirements.

Once the required fields are populated the user selects the "up sync" button to send the events to the registry, which creates the ICP with "new" status.

After the registry acknowledgement file has been received by Axos the user can create a distributor pricing event. Once this event has been sent and accepted by the registry, the status will be updated to "ready".

Future compliance is not expected to be affected by the material change.

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

I considered whether the migration to Axos was likely to result in late provision of registry information. I viewed process documentation and test results.

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. The synchronisation processes discussed in **section 2.1** will ensure that data is updated on the registry within five minutes of being entered into Axos.

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

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

I considered whether the migration to Axos was likely to result in late provision of registry information. I viewed process documentation and test results.

Audit commentary

TLC's network services team complete initial electrical connection, and provide paperwork confirming the date. In many cases one person completes the network connection and metering installation at the same time. If different people are involved in the connection, the visit is coordinated so that the meter installation and connection occur on the same day. If it is not possible for the meter installation and connection to be completed on the same day, the network services team ensures that the ICP is not connected and electricity is not flowing into the installation until after the meter is installed.

Initial electrical connection dates will be entered into Axos, and data is automatically transferred from Axos to the registry. The synchronisation processes discussed in **section 2.1** will ensure that data is updated on the registry within five minutes of being entered into Axos.

As recorded in the previous audit, initial electrical connection dates are not currently validated against the trader's earliest active date and the MEP's meter certification date. In **section 2.1** I have recommended using the registry AC020 report to complete this validation.

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 11.17

Code related audit information

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

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

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

Audit observation

The new connection process was examined in **sections 3.1** and **3.2**. I considered whether the migration to Axos was likely to result in late or inaccurate provision of registry information.

Audit commentary

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

Review of the registry list confirmed that:

- a trader is recorded for all ICPs with “active” or “inactive” status,
- a proposed trader is recorded for all ICPs with “ready” status, and
- shared unmetered load is not recorded for ICPs on TLC’s network.

The material change will not affect the trader acceptance process, and future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.31

Code related audit information

A distributor must not connect an ICP that is not an NSP unless requested to do so by the trader trading at the ICP, or if there is only shared unmetered load at the ICP and each trader has been advised.

Audit observation

The new connection process was examined, and I found that the migration to Axos is unlikely to affect future 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.

The material change will not affect the trader acceptance process, and future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.31A

Code related audit information

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

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

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

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

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

Audit observation

The new connection process was examined, and I found that the migration to Axos is unlikely to affect future compliance.

Audit commentary

An ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP.

TLC's network services team complete initial electrical connection, and provide paperwork confirming the date. In many cases one person completes the network connection and metering installation at the same time. If different people are involved in the connection, the visit is coordinated so that the meter installation and connection occur on the same day. If it is not possible for the meter installation and connection to be completed on the same day, the network services team ensures that the ICP is not connected and electricity is not flowing into the installation until after the meter is installed.

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

The material change will not affect the process, and future compliance is not expected to be affected by the material change.

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 and notifications to the reconciliation manager were reviewed.

Audit commentary

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

The material change will not affect the process, and future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.30(A)

Code related audit information

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

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

The material change will not affect the process, and future compliance is not expected to be affected by the material change.

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 process to create ICPs using Axos was checked. I viewed process documentation and test results.

Audit commentary

ICP numbers are created in the correct format by AXOS, and there are processes in place to ensure that ICP numbers in AXOS and Orion do not overlap.

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

The process to provide loss category information using Axos was checked. I viewed process documentation and test results.

Audit commentary

The loss category is assigned to the ICP based on the transformer, which is mapped to the NSP. For large ICPs the asset management group will advise the correct loss factor to be applied.

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

The synchronisation processes discussed in **section 2.1** will ensure that data is updated on the registry within five minutes of being entered into Axos. Future compliance is not expected to be affected by the material change.

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 process to create ICPs using Axos was checked. I viewed process documentation and test results.

Audit commentary

ICPs will be created in Axos, and the user will be able to populate address, and network event information at the same time. Once the required fields are populated the user selects the “up sync” button to send the events to the registry, which creates the ICP with “new” status.

Once the events have been received back by Axos the user can create a distributor pricing event. After this event has been sent and accepted by the registry, the status will be updated to “ready”.

The synchronisation processes discussed in **section 2.1** will ensure that data is updated on the registry within five minutes of being entered into Axos. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

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

Audit observation

The process to monitor ICPs at “new” and “ready” status was reviewed.

Audit commentary

The process to monitor ICPs at “new” and “ready” status will change with the implementation of Axos.

- Previously TLC maintained a spreadsheet of new connections, which was reviewed every six months. ICPs which had not progressed were followed up to determine whether they were still required.
- The new connections spreadsheet will not be maintained once Axos is implemented. Users cannot currently search for ICPs with “new” or “ready” status within Axos, but there is further

planned development to allow this. In the meantime, ICPs with “new” and “ready” status will be identified through a weekly registry report showing all ICPs with “new” or “ready” status. ICPs at “new” and “ready” status will be reviewed every six months and followed up with the proposed trader to determine whether they are still required.

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

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

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

Audit observation

The EMI wholesale data set and registry list were reviewed to identify any generation stations with capacity of 10 MW or more and determine compliance.

Audit commentary

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

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(4)

Code related audit information

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

Audit observation

The new connection process was examined in relation to the electrical connection process.

Audit commentary

TLC are aware of their obligation to ensure that the trader has provided approval and requested connection before streetlights are connected by TLC as the trader’s agent. Where a new ICP is created

or an increase in load is required, TLC's new connection process described in **section 3.2** applies. Additions to unmetered load for existing ICPs are treated as load changes.

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.30C and 10.31C

Code related audit information

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

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

Audit observation

The disconnection process was examined.

Audit commentary

TLC will only undertake an electrical disconnection when a request is received from a trader or for safety. In both instances TLC will liaise with the relevant trader.

Audit outcome

Compliant

3.18. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33C

Code related audit information

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

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

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

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

Audit observation

Processes for meter bridging were reviewed.

Audit commentary

Bridging will only occur in accordance with clause 10.33C. Processes have been put in place to notify the trader within one business day of the meter being bridged.

Audit outcome

Compliant

4. MAINTENANCE OF REGISTRY INFORMATION

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

Code reference

Clause 8 Schedule 11.1

Code related audit information

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

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

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

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

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

Audit observation

The process to maintain ICP information using Axos was checked. I viewed process documentation and test results.

Audit commentary

Network, address, and pricing events

When information recorded in the registry changes, the distributor should ensure that the registry is updated within three business days. This section assesses compliance for updates to existing information, initial population of data for new ICPs is assessed in **sections 3.4 and 3.5**.

The user selects the event type which requires update in Axos, and the screen is automatically populated with the existing values for each field in Axos and today's event date. The user modifies the event and event date information as required. Future event dates are not allowed and drop down lists and field validations are set to help to ensure only valid values are entered. Once saved, the changes will automatically be synchronised to the registry during the next scheduled synchronisation (which occurs every five minutes). Synchronisation can be triggered manually where an immediate change is required.

Axos retrieves registry acknowledgement files every five minutes. The files are reviewed in the registry manager to identify successful and failed updates. Failed updates appear as synchronisation status alerts on the landing page in Axos, and will be investigated.

If an event needs to be changed, it can be deleted before the record is synchronised with the registry, otherwise Axos allows event reversals and replacements to be sent. Events can only be reversed if they are the latest event for that event type, and if an older event needs to be reversed all later events must be reversed or the update will need to be manually processed on the registry.

Axos will automatically update the registry for all distributor maintained events. Synchronisation occurs every five minutes unless it is manually triggered.

Registry events processed by other parties are updated in Axos daily. A synchronisation is completed each morning at 4am to capture registry data updates within the last seven days. Axos does not use notification files.

A recommendation to validate Axos data against the registry is made in **section 2.1**. Timeliness and accuracy of registry updates will be checked during the first audit after go-live.

Status updates

Status updates to “new” and “ready” are created by the registry once the information required to achieve the status has been populated. ICPs can be reversed from “ready” to “new” status by removing the distributor pricing information in Axos and the update being synchronised with the registry. The “new” and “ready” status information is imported back into Axos through the registry synchronisation process. ICPs can be moved to “distributor” or “decommissioned” statuses according to the general registry event update process, where the change is processed in Axos and then synchronised with the registry.

NSP changes

NSP changes are recorded in Basix. Any changes made in Basix will be reconciled to the registry via a daily reconciliation between Basix and the registry. Because Axos and the registry are synchronised this will identify any updates required in Axos.

In addition to this, each month a transformer update file will be sent to the Senior Data Analyst and checked against Axos, to identify any discrepancies for corrections.

NSP changes are updated in Axos and the registry according to the general update process above.

Audit outcome

Compliant

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 provide NSP information using Axos was checked. I viewed process documentation and test results.

Audit commentary

For new connections, transformer numbers are provided by the asset management group and loaded into Orion. The operator selects the transformer and Orion brings through from Basix all the associated information for that transformer. This includes the NSP and loss category code associated with that NSP. For large sites, the asset management group will advise the correct loss factor to be applied.

NSP changes are recorded in Basix. Any changes made in Basix will be reconciled to the registry via a daily reconciliation between Basix and the registry. Because Axos and the registry are synchronised this will identify any updates required in Axos.

In addition to this, each month a transformer update file will be sent to the Senior Data Analyst and checked against Axos, to identify any discrepancies for corrections.

Future compliance is not expected to be affected by the material change.

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

TLS supply ICP numbers to customers on request, and this process will not be affected by the material change.

Audit commentary

Future compliance is not expected to be affected by the material change.

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 provide address information using Axos was checked. I viewed process documentation and test results.

Audit commentary

Axos uses a combination of NZ Post, LINZ, and Statistics NZ information in its address search function. The user begins typing an address and Axos looks up to the linked information and the user can select the valid address. If the address cannot be found the details are manually populated.

Axos system controls prevent duplicate addresses from being entered, an error message is produced if a user attempts to create an ICP with an address that matches an existing ICP.

I rechecked the incomplete addresses identified during the previous audit and found they had been corrected. A recommendation is made in **section 2.1** to use the AC020 distributor compliance report to ensure addresses are complete and accurate.

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

4.5. Electrically disconnecting an ICP (Clause 3 Schedule 11.1)

Code reference

Clause 3 Schedule 11.1

Code related audit information

Each ICP created after 7 October 2002 must be able to be electrically disconnected without electrically disconnecting another ICP, except for ICPs that are the point of connection between a network and an embedded network, or ICPs that represent the consumption calculated by the difference between the total consumption for the embedded network and all other ICPs on the embedded network.

Audit observation

This part of the new connection process will not change.

Audit commentary

TLC's new connections process contains a step that ensures that any ICP can be disconnected without disconnecting any other ICP, and electricians working on the network are advised of this requirement.

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 7(1) Schedule 11.1

Code related audit information

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

- *the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)*
- *the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)*
- *the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)*
- *the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)*
- *the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)*
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):*
 - a) *the unique loss category code assigned to the ICP*
 - b) *the ICP identifier of the ICP*
 - c) *the NSP identifier of the NSP to which the ICP is connected*
 - d) *the plant name of the embedded generating station*

- *the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)*
- *if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):*
 - a) *a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity*
 - b) *a blank chargeable capacity if the capacity value can be determined for a billing period from metering information collected for that billing period*
 - c) *if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
 - (i) no capacity value recorded in the registry field for the chargeable capacity; and*
 - (ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
 - d) *if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-*
 - (i) the annual capacity value recorded in the registry field for the chargeable capacity; and*
 - (ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded*
 - e) *the actual chargeable capacity of the ICP in any other case*
- *the distributor installation details for the ICP determined by the price category code assigned to the ICP (if any), which may be placeholder distributor installation details only if the distributor is unable to assign the actual distributor installation details because the capacity or volume information required to assign the actual distributor installation details cannot be determined before electricity is traded at the ICP (Clause 7(1)(i) of Schedule 11.1)*
- *the participant identifier of the first trader who has entered into an arrangement to sell or purchase electricity at the ICP (only if the information is provided by the first trader) (Clause 7(1)(j) of Schedule 11.1)*
- *the status of the ICP (Clause 7(1)(k) of Schedule 11.1)*
- *designation of the ICP as "Dedicated" if the ICP is located in a balancing area that has more than 1 NSP located within it, and the ICP will be supplied only from the NSP advised under Clause 7(1)(b) of Schedule 11.1, or the ICP is a point of connection between a network and an embedded network (Clause 7(1)(l) of Schedule 11.1)*
- *if unmetered load, other than distributed unmetered load, is associated with the ICP, the type and capacity in kW of unmetered load (Clause 7(1)(m) of Schedule 11.1)*
- *if shared unmetered load is associated with the ICP, a list of the ICP identifiers of the ICPs that are associated with the unmetered load (Clause 7(1)(n) of Schedule 11.1)*
- *if the ICP is capable of generating into the distributors network (Clause 7(1)(o) of Schedule 11.1):*
 - a) *the nameplate capacity of the generator; and*
 - b) *the fuel type*
- *the initial electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).*

Audit observation

The process to provide complete and accurate ICP information using Axos was checked. I viewed process documentation and test results.

Audit commentary

The synchronisation processes discussed in **section 2.1** will ensure that data is updated on the registry completely and accurately. Future compliance is not expected to be affected by the material change.

Initial Electrical Connection Date

As recorded in the previous audit, initial electrical connection dates are not currently validated against the trader's earliest active date and the MEP's meter certification date. In **section 2.1** I have recommended using the registry AC020 report to complete this validation.

Distributed Generation

The only change to the distributed generation process will be that data will be entered into Axos and transferred to the registry, instead of from Orion. The process for distributed generation is:

1. TLC requires an application before any distributed generation is connected to their network; TLC closely monitors this area due to the health and safety risks associated, and applications are tracked via a spreadsheet maintained by the network services team,
2. once it is confirmed that distributed generation is recorded through the inspection process, the spreadsheet is updated with an effective date and the installed generation details, and
3. The connections team checks the spreadsheet weekly and populates generation details in Axos for any ICPs which have all the required details and the effective date populated; if a record is partially completed, the connections team queries the ICP with the network team to confirm whether it is ready to be inputted and obtain any missing details (Axos has controls to ensure that generation capacity and fuel type can only be populated if the installation type is B or G and the network update is automatically sent to the registry).

The previous audit found there are sometimes delays in distributed generation spreadsheet being updated, which had resulted in some bulk updates to distributed generation details when the next weekly check is completed. The connections team temporarily stopped checking the spreadsheet during the audit period, and the check was reinstated during September 2021. It is expected that the next full audit may find some backdated updates to distributed generation information as a result of this.

The previous audit recommended TLC consider validating generation information against trader and meter owner records, this recommendation has not been implemented and is repeated below.

Recommendation	Description	Audited party comment	Remedial action
Investigate ICPs where distributed generation is indicated, but an application has not been received.	<p>At least monthly, compare ICPs which have an EG1 or PV1 profile on the registry list to the list of ICPs which distributed generation applications have been received for.</p> <p>It may also be helpful to cross check to the MEP's meter channel records to determine whether injection registers are installed, and the high risk database may also contain information on generation installation (https://www.energysafety.govt.nz/energysafety/app/highrisk-db/home).</p>	Will adopt the recommendation in September 2021.	Identified

	Follow up with the trader and/or customer to determine whether generation is installed.		
--	---	--	--

Unmetered Load

Part 11 states the distributors must provide unmetered load type and capacity of the unmetered load to the registry “if known”. If distributor unmetered load is populated, it is required to be accurate.

The only change to the distributed generation process will be that data will be entered into Axos and transferred to the registry, instead of from Orion. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

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

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

Audit observation

TLC will move from customer billing in Orion (where all ICPs have the same price category applied on the registry) to retailer billing in Axos, where different ICPs will have different price categories.

Audit commentary

The pricing team provides the connections team with pricing information as part of the new connections process. Placeholders are not used for pricing.

The Axos registry manager completes validations on the pricing information before sending the file to the registry.

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 process to provide address information including GPS coordinates using Axos was checked. I viewed process documentation and test results.

Audit commentary

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

GPS coordinates were recorded for 123 active ICPs and one inactive ICP, and two new connections in progress on the registry list. The coordinates were in NZTM2000 format and consistent with the other addressing information.

Future compliance is not expected to be affected by the material change.

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.

Audit commentary

TLC’s new connections process includes a step to confirm trader acceptance before livening is scheduled. Each ICP has a single price category, as TLC only has one price category.

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

Monitoring of ICPs at “ready” status is discussed in **section 3.14**.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.1

Code related audit information

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

Audit observation

Processes to manage the distributor status were reviewed. The registry list was examined to determine compliance.

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.

Shared unmetered load is discussed further 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 reviewed. I viewed process documentation and test results.

Audit commentary

There will be no changes to the decommissioning process. 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 upon receipt of the appropriate paperwork. This includes confirmation that metering has been removed.

Once the decommission is completed in Axos, the synchronisation processes discussed in **section 2.1** will ensure that data is updated on the registry. Future compliance is not expected to be affected by the material change.

I re-checked ICPs at “ready for decommissioning” status during the previous audit where the customer had indicated the ICP should not be decommissioned:

- 0005820970WM048 has been moved to inactive vacant status, and
- 0001017920WM496 still has the trader listed as KING, and the ICP is under investigation to determine whether it should be connected; the customer is currently considering whether they still require the ICP or will agree to it being decommissioned.

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 2 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, and the impact of the material change on price category codes was assessed.

Audit commentary

With the change to Axos, TLC will bill retailers instead of directly billing their end-consumers. This billing process is outside the scope of this material change audit, but maintenance of the codes on the pricing table on the registry is within the scope.

88 new pricing codes were added to the registry price category table, two months before they came into effect. ICPs will not have these codes applied until October 2021.

Price categories will be updated on the registry via the Axos registry manager.

Future compliance is not expected to be affected by the material change.

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, and the impact of the material change on loss factor updates was assessed.

Audit commentary

TLC has not created any new loss factors during the audit period.

Loss categories will be updated on the registry via the Axos registry manager, and future compliance is not expected to be affected by the material change.

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, and the impact of the material change on loss factor updates was assessed.

Audit commentary

TLC has not created any new loss factors during the audit period.

Loss categories will be updated on the registry via the Axos registry manager, and future compliance is not expected to be affected by the material change.

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 2 embedded networks, the embedded network owner must give written notice to the reconciliation manager of the creation or decommissioning.

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

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

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

Audit observation

The NSP table was examined.

Audit commentary

TLC did not create or decommission any NSPs during the audit period. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table was examined.

Audit commentary

No new NSPs were created by TLC during the audit period. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

No balancing area changes occurred during the audit period. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

If a participant notifies the creation of an NSP, or the transfer of an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor, the distributor must give notice to the reconciliation manager at least 1 month before the creation or transfer of:

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

Audit observation

The NSP table was reviewed.

Audit commentary

TLC has not created any new embedded networks during the audit period. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 24(2) and (3) Schedule 11.1

Code related audit information

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

Audit observation

The NSP table was reviewed.

Audit commentary

No balancing area changes have occurred during the audit period. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 27 Schedule 11.1

Code related audit information

If a transfer of an ICP results in an ICP becoming an NSP at which an embedded network connects to a network, or in an ICP becoming an NSP that is an interconnection point, in respect of the distributor's network, the distributor must give written notice to any trader trading at the ICP of the transfer at least 1 month before the transfer.

Audit observation

The NSP table was reviewed.

Audit commentary

No existing ICPs became NSPs during the audit period. Future compliance is not expected to be affected by the material change.

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. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.25(1) and 10.25(3)

Code related audit information

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

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

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

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

Audit observation

The Network Supply Points (NSP) table was examined to determine compliance.

Audit commentary

All meters had current certification at the time the table was reviewed. TLC has a procedure to update the NSP table, and the certification details are provided via the reconciliation manager portal.

Distributor	NSP POC	Description	MEP	Certification Expiry
LINE	ATI0111	ATIAMURI	MRPL	16/08/2022
LINE	MEP0112	MOKAI	FCLM	16/02/2022

Distributor	NSP POC	Description	MEP	Certification Expiry
LINE	MEP0113	MOKAI	FCLM	16/02/2022
LINE	TLC0111	TANGIWAI OHAKUNE INTERCONNECT	FCLM	18/08/2023
LINE	WKM0331	WHAKAMARU	FCLM	23/09/2021

Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

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

Code reference

Clause 10.25(2)

Code related audit information

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

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

Audit observation

The NSP table was reviewed.

Audit commentary

TLC has not created any new NSPs during the audit period. Future compliance is not expected to be affected by the material change.

Audit outcome

Compliant

6.10. Obligations concerning change in network owner (Clause 29 Schedule 11.1)

Code reference

Clause 29 Schedule 11.1

Code related audit information

If a network owner acquires all or part of a network, the network owner must give written notice to:

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

TLC have not initiated any changes of network owner. Future compliance is not expected to be affected by the material change.

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. Future compliance is not expected to be affected by the material change.

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 table was reviewed.

Audit commentary

TLC has not initiated the transfer of any ICPs during the audit period. Future compliance is not expected to be affected by the material change.

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 table was reviewed.

Audit commentary

TLC has not initiated the transfer of any ICPs during the audit period. Future compliance is not expected to be affected by the material change.

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

Unmetered load details will be updated on the registry from Axos' registry manager. The registry list as at 26/08/21 was reviewed to identify all ICPs with shared unmetered load.

Audit commentary

TLC has no existing shared unmetered load.

Previous audit exceptions

Exceptions identified during the previous audit were re-checked.

Waitomo District Council (WDC) – Kaka Street

Eight street lights at Paearuhe in Kaka Street, Piopio which are confirmed to be unmetered but no unmetered load was recorded. TLC has created a new ICP for each light, and Trustpower is the responsible retailer for each ICP.

Slim Pole ID	Road Name	Lamp Model	Total Wattage	ICP	Distributor unmetered load details
1839	KAKA ST	LED22NW	22	0001113549WMBD7	0022;10.0;Streetlights
1842	KAKA ST	LED22NW	22	0001113550WMF2B	0022;10.0;Streetlights
1843	KAKA ST	LED22NW	22	0001113551WM36E	0022;10.0;Streetlights
1844	KAKA ST	LED22NW	22	0001113552WMFAE	0022;10.0;Streetlights
1845	KAKA ST	LED22NW	22	0001113553WM3EB	0022;10.0;Streetlights
1847	KAKA ST	LED22NW	22	0001113554WME21	0022;10.0;Streetlights
1849	KAKA ST	LED22NW	22	0001113555WM264	0022;10.0;Streetlights
1850	KAKA ST	LED22NW	22	0001113556WMEA4	0022;10.0;Streetlights

Waitomo District Council (WDC) – Rauparaha St

WDC have advised TLC that they are responsible for this streetlight, which should be recorded against an ICP in the WDC DUMML database. TLC is not required to undertake any further action.

Slim Pole ID	Road Name	Lamp Model	Total Wattage
2190	RAUPARAH ST	Itron Zero 0c6 STA 4.5-2M/D/NZ	19.5

Waitomo District Council (WDC) – Waitomo Village Rd

TLC is working with WDC to determine who is responsible for this unmetered streetlight, so that it can either be recorded against an ICP in the WDC DUMML database or TLC will create a new ICP.

Slim Pole ID	Road Name	Lamp Model	Total Wattage
1088	WAITOMO VILLAGE RD	150w HPS	168

Ruapehu District Council – Chateau

The September 2020 audit recorded 20 private lights which were excluded from submission information. Two were confirmed to be metered, and 16 are Department of Conservation lights near the Chateau which are being investigated by Ruapehu District Council to determine whether they are unmetered and if so, which distributed unmetered load database they should be included within. TLC has emailed Ruapehu District Council requesting an update.

Ruapehu District Council – House Avenue

Two street lights at TLC's depot in House Avenue were confirmed to be unmetered but no unmetered load was recorded. TLC has created a new ICP for each light, and Trustpower is the responsible retailer for each ICP. The ICPs have now been made active.

Slim Pole ID	Road Name	Lamp Model	Total Wattage	ICP	Distributor unmetered load details
1687	HOUSE AVENUE	70watt SON-E	83	0001113529WM427	0070;10.4;Streetlight
539	HOUSE AVENUE	70watt SON-T	83	0001113530WM0DB	0070;10.4;Streetlight

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

Unmetered load details will be updated on the registry from Axos' registry manager.

The registry list was reviewed to identify all ICPs with 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 impact of the material change on creation and review of loss factors was assessed.

Audit commentary

Future compliance is not expected to be affected by the material change, because loss factors are reviewed manually using information from the Basix (asset management) system.

Audit outcome

Compliant

CONCLUSION

Compliance was assessed for all areas which could be impacted by the material change.

The registry synchronisation process will help to ensure that current values recorded in Axos match the registry, and unsuccessful updates will be identified and resolved through the synchronisation process.

It is possible that registry and Axos could have inconsistencies, and that data could match on the registry and in Axos but be inconsistent with other data fields. It would be prudent to ensure that registry data is matched to Axos at least weekly, and TLC intends to set up a datawarehouse which exception reporting can be generated from.

There are currently no checks to validate initial electrical connection dates and generation details against MEP and trader data, or checks for existing duplicate and incomplete addresses. I recommend that the registry AC020 reports are reviewed, and any discrepancies are investigated and corrected.

PARTICIPANT RESPONSE

We agree with the Auditor and adopt the recommendations in this document.