

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**



For

NEW ZEALAND AIRWAYS LTD (NZAL)

Prepared by: Rebecca Elliot

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Date audit report completed: 20 April 2020

Audit report due date: 26 April 2020

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EXECUTIVE SUMMARY

This Distributor audit was conducted at the request of New Zealand Airways Ltd (NZAL) to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

The audit was conducted in accordance with the Guideline for Distributor Audits V7.1, which was produced by the Electricity Authority.

NZAL's compliance is reliant on the compliance of TENCO, as the contractor. In this report, I have only recorded those matters where issues were discovered or where specific analysis was undertaken. TENCO's audit report will be submitted with this report.

The audit found six non-compliances, and no recommendations were made.

The next audit frequency table indicates that the next audit be due in 18 months but due to the strong controls and minor nature of the non-compliances found in place I recommend that the next audit be in 24 months.

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 |
|--|---------|-----------------------|---|----------|-------------------|--------------------|-----------------|
| Participants may request distributors to create ICPs | 3.2 | 11.5(3) | One ICP created late. | Strong | Low | 1 | Cleared |
| Connection of NSP that is not point of connection to grid | 3.9 | 10.30 | The Reconciliation Manager was advised after 23 business days for NBS0011. | Strong | Low | 1 | Identified |
| Changes to registry information | 4.1 | 8 Schedule 11.1 | One late Network event. | Strong | Low | 1 | Cleared |
| ICP location Address | 4.4 | 2 Schedule 11.1 | The list file showed two duplicate addresses. | Strong | Low | 1 | Identified |
| Responsibility for metering information for NSP that is not a POC to the grid | 6.8 | 10.25(1) and 10.25(3) | The meter installation certification expiry date advised late for NSPs NPS0011 and NWH0011. | Strong | Low | 1 | Identified |
| Responsibility for metering information when creating an NSP that is not a POC to the grid | 6.9 | 10.25(2) | The meter installation certification expiry date advised after 31 days for NSP NBS0011. | Strong | Low | 1 | Identified |
| Future Risk Rating | | | | | | 6 | |

| | | | | | | |
|----------------------------|-----------|-----------|-----------|-----------|----------|----------|
| 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 |
|---------|---------|----------------|-------------|
| | | Nil | |

ISSUES

| Subject | Section | Issue | Remedial action |
|---------|---------|-------|-----------------|
| | | Nil | |

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

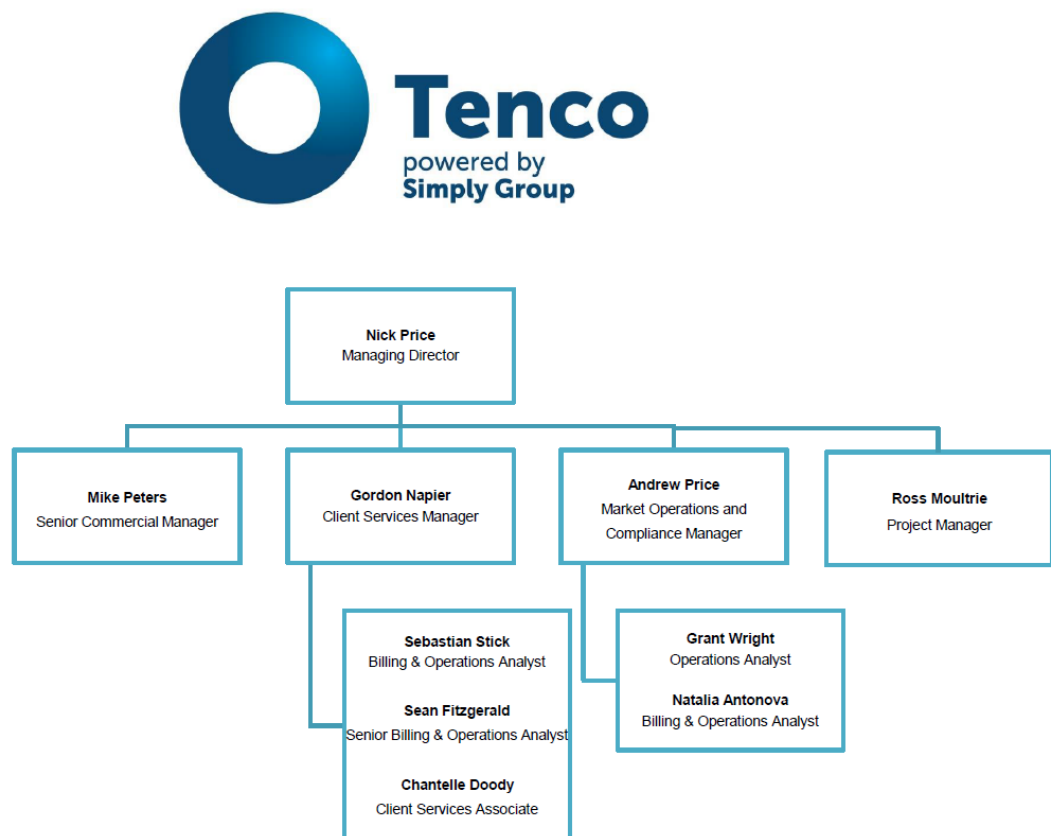
The Electricity Authority website was checked to determine whether NZAL has any Code exemptions in place.

Audit commentary

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

1.2. Structure of Organisation

TENCO provided an organisation chart:



1.3. Persons involved in this audit

Auditor:

| Name | Title |
|----------------|--------------------|
| Rebecca Elliot | Lead Auditor |
| Brett Piskulic | Supporting Auditor |

Personnel assisting in this audit were:

| Name | Title | Organisation |
|--------------|--------------------|--------------|
| Grant Wright | Operations Analyst | TENCO |
| Nick Price | Managing Director | TENCO |

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

TENCO performs all NZAL's responsibilities.

1.5. Supplier list

All activities covered by the scope of this audit are conducted by TENCO.

1.6. Hardware and Software

Hardware and software is discussed in the TENCO agent audit report.

1.7. Breaches or Breach Allegations

NZAL has not had any breach allegations relevant to this audit recorded by the Electricity Authority.

1.8. ICP and NSP Data

Review of the NSP table showed NZAL had the following NSPs as at 31/03/2020.

| Distributor | NSP POC | Description | Parent POC | Parent Network | Balancing Area | Network type | Start date | No of ICPs |
|-------------|---------|--|------------|----------------|----------------|--------------|------------|------------|
| NZAL | NAH0011 | 139 THE TERRACE ASTERON HOUSE | WIL0331 | CKHK | NAH0011NZAILE | E | 1/03/2019 | 12 |
| NZAL | NPP0011 | PRIME PROPERTY TOWER | WIL0331 | CKHK | NPP0011NZAILE | E | 1/03/2019 | 26 |
| NZAL | NPS0011 | NZAL PSIS BUILDING | WIL0331 | CKHK | NPS0011NZAILE | E | 1/03/2019 | 26 |
| NZAL | NSR0011 | 81 MOLESWORTH STREET | KWA0111 | CKHK | NSR0011NZAILE | E | 1/04/2014 | 14 |
| NZAL | NT00011 | TECHNOLOGY ONE HOUSE | WIL0331 | CKHK | NT00011NZAILE | E | 14/09/2018 | 37 |
| NZAL | NUL0011 | 498 JACKSON ST PETONE WELLINGTON | GFD0331 | CKHK | NUL0011NZAILE | E | 1/03/2019 | 11 |
| NZAL | NWH0011 | WEL HOUSE | HAM0331 | WAIK | NWH0011NZAILE | E | 1/04/2010 | 19 |

Five NSPs appear to have started during the audit period. These all have new start dates but are not new networks. This is discussed in **section 6.1**.

Two new NSPs were created during the audit period:

| NSPs created during the period (since 01/01/18) | | | | | | | | |
|---|---------|------------------------------------|------------|----------------|----------------|--------------|------------|------------|
| Distributor | NSP POC | Description | Parent POC | Parent Network | Balancing Area | Network type | Start date | No of ICPs |
| NZAL | NAT0011 | 500 VICTORIA STREET HAMILTON | HAM0331 | WAIK | NAT0011NZAILE | E | 1/02/2018 | 15 |
| NZAL | NBS0011 | 10 BRANDON STREET WELLINGTON | KWA0111 | CKHK | NBS0011NZAILE | E | 1/03/2019 | 13 |

I note that NBS0011 had an original start date of 1/10/18. The new start date for this network was due a change of trader for the SB ICP.

No NSPs were decommissioned or transferred to or from other networks during the audit period.

| Status | Number of ICPs (2020) | Number of ICPs (2017) | Number of ICPs (2016) | Number of ICPs (2015) |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Distributor (888) | - | - | - | - |
| New (999) | - | - | 1 | 1 |
| Ready (000) | - | 2 | - | - |
| Active (2,0) | 146 | 117 | 143 | 124 |

| | | | | |
|---|----|----|----|----|
| Inactive - new connection in progress (1,12) | 1 | - | - | - |
| Inactive – vacant (1,4) | 7 | 1 | 2 | 1 |
| Inactive – AMI remote disconnection (1,7) | - | - | - | - |
| Inactive – at pole fuse (1,8) | - | - | - | - |
| Inactive – de-energised due to meter disconnected (1,9) | 1 | - | - | - |
| Inactive – de-energised at meter box switch (1,10) | - | - | - | - |
| Inactive - at meter box switch (1,11) | - | - | - | - |
| Inactive – ready for decommissioning (1,6) | - | - | - | - |
| Inactive – reconciled elsewhere (1,5) | 1 | 1 | 1 | 21 |
| Decommissioned (3) | 17 | 15 | 14 | 12 |

1.9. Authorisation Received

All information was provided directly; an authorisation letter was not required.

1.10. Scope of Audit

This Distributor audit was performed at the request of NZAL, to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

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

The scope of the audit is shown in the table below:

| Functions Requiring Audit Under Clause 11.10(4) of Part 11 | Contractors Involved in Performance of Tasks |
|---|--|
| The creation of ICP identifiers for ICPs. | TENCO |
| The provision of ICP information to the registry and the maintenance of that information. | |
| The creation and maintenance of loss factors. | |

The audit report for TENCO will be submitted with this audit.

1.11. Summary of previous audit

NZAL provided a copy of their previous audit conducted in February 2018 by Tara Gannon of Veritek Limited. The audit recorded three non-compliances described in the table below and made one recommendation.

Table of Non-Compliance

| Subject | Section | Clause | Non-compliance | Status |
|--|---------|-----------------------|--|---|
| Requirement to provide complete and accurate information | 2.1 | 11.2(1) and 10.6(1) | Initial energisation date was incorrectly populated for one ICP, appearing as a late update. | Cleared |
| Changes to registry information | 4.1 | 8 Schedule 11.1 | One late status update for a decommissioned ICP, and five late pricing events. | Still existing |
| Meter certification | 6.8 | 10.25(1) and 10.25(3) | The Reconciliation Manager was notified 426 days after recertification for NPS0111. | Still existing but note notifications are being provided in much shorter time frames than was found in the last audit |

Table of Issues

| Subject | Section | Clause | Recommendation for improvement | Status |
|---|---------|-----------------------|---|---|
| Audit trails for NSP metering information | 6.8 | 10.25(1) and 10.25(3) | There is no audit trail for NSP metering updates via the RM portal. | Still existing but is for the RM to action so is not repeated |

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

The management of this process is discussed in the TENCO report. The registry list file as at 05/03/20, the audit compliance reports for the period 1/03/18 to 29/02/20 and the event detail report for 01/03/18 to 05/03/20, and NSP table were examined to confirm compliance.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause. Data completeness and accuracy was reviewed.

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 and observed throughout the audit.

Audit commentary

This area is discussed in several sections in this report.

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

The new connection process is discussed in the TENCO audit report.

The registry list as at 05/03/20 and event detail report for 01/03/18 to 05/03/20 were reviewed to identify all new connections during the period and check that ICPs were created as required by this clause.

Audit commentary

Compliance is recorded for TENCO. Examination of the registry list found 10 ICPs were created during the period. ICPs were created in accordance with this clause for all new connections.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

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

Audit observation

The new connection process is discussed in the TENCO report. ICP requests are made by embedded network management or traders. If the request is not made by a trader this rule does not apply.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause.

There were ten new ICPs created during the audit period, all of these were requested by the trader. One ICP was created after five business days, the remainder were created within the required three business days. I checked with TENCO and they confirmed that the trader sent a reminder after five business days and the ICP was created immediately.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|--|-----------------|------------------------|
| Audit Ref: 3.2 With: Clause 11.5(3) From: 04-Oct-19 To: 08-Oct-19 | One ICP created late. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | Controls are rated as strong, as they are sufficient to ensure ICPs are created on time most of the time. The risk is low as only ICP was affected, and the ICP was created immediately when a reminder was received. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| The ICP was created immediately on reminder from trader SIMP | | 8/10/2019 | Cleared |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Updated New ICP process: give reason to trader if unable to create ICP within 3 BD of receiving request; add compliance check to schedule check and further action in 3 BD. User training. | | 20/4/2020 | |

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

Code reference

Clause 11.7

Code related audit information

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

Audit observation

The new connection process is discussed in the TENCO audit report.

The registry list as at 05/03/20 and event detail report for 01/03/18 to 05/03/20 were reviewed to identify all new connections during the period and check that information was provided as required by this clause.

Audit commentary

Information was provided as required by this clause for all ten ICPs created during the report period.

Audit outcome

Compliant

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

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

The new connection process is discussed in the TENCO report. The audit compliance reports for the period 1/03/18 to 29/02/20 were checked to determine the timeliness of the provision of ICP information for NZAL's new connections.

Audit commentary

The process followed by TENCO is compliant. All ten ICPs were created as soon as practicable and prior to electrical connection.

Audit outcome

Compliant

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

The registry list as at 05/03/20, the audit compliance reports for the period 1/03/18 to 29/02/20 and event detail report for 01/03/18 to 05/03/20 were examined to determine the timeliness of the provision of initial electrical connection date information for new connections.

Audit commentary

The Initial electrical connection dates were populated within ten days for all ICPs.

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 **section 3.2**.

The registry list as at 05/03/20 and event detail report for 01/03/18 to 05/03/20 were examined to determine compliance.

Audit commentary

As discussed in the TENCO agent audit report, the new connection process requires applications for new connections to be approved by traders.

Review of the registry list confirmed that a trader is currently recorded for all active ICPs, and there is no known shared unmetered load on NZAL's network.

All new connections during the period had proposed trader recorded prior to initial electrical connection.

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 in **section 3.2**. The registry list as at 05/03/20 and event detail report for 01/03/18 to 05/03/20 were examined to determine compliance.

Audit commentary

As discussed in the TENCO agent audit report, the new connection process requires applications for new connections to be approved by traders. The ten new connections which were electrically connected during the report period were reviewed and were approved to be connected by the trader.

Review of the registry list confirmed that a trader is currently recorded for all active ICPs.

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 in **section 3.2**. The registry list as at 05/03/20 and event detail report for 01/03/18 to 05/03/20 were examined to determine compliance.

Audit commentary

All electrically connected ICPs had certified meters on their initial electrical connection date. No temporary electrical connections were identified.

Audit outcome

Compliant

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

Code reference

Clause 10.30

Code related audit information

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

Two new NSPs were created during the audit period:

| NSP | NSP start date |
|---------|----------------|
| NAT0011 | 1/02/2018 |
| NBS0011 | 1/10/2018 |

The information required by this clause was provided to the Reconciliation Manager after 31 business days for NSP NBS0011. The information for NAT0011 was provided within the required timeframe.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|--|-----------------|------------------------|
| Audit Ref: 3.9 With: Clause 10.30 From: 08-Jan-20 To: 05-Mar-20 | The Reconciliation Manager was advised after 23 business days for NBS0011. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are rated as strong, as they are sufficient to ensure updates are on time most of the time. The impact on settlement and participants is minor; therefore, the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Meter certification details have been entered and advised to the Reconciliation manager | | Various | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Monitoring of certificate request dates using workflows and system Dashboard. Monitoring MEP certificate delivery timeliness. | | On going | |

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 on the registry was examined.

Audit commentary

Two new NSPs were created during the audit period as described in **section 3.9**. TENCO confirmed that the NSPs were not temporarily electrically connected.

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 ICP creation process is discussed in the TENCO report.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause.

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

The list file as at 05/03/20 was examined to confirm whether all active ICPs have a single loss category.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 13 Schedule 11.1

Code related audit information

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

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

Audit observation

The ICP creation process was reviewed as part of the TENCO agent audit.

The registry list as at 05/03/20 and event detail report for 01/03/18 to 05/03/20 were examined to determine compliance.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause.

Some ICPs are created at “New” and others are created at “Ready”.

There are currently no ICPs at “New”. Monitoring of ICPs at “new” status is discussed in **section 3.14**. No ICPs have been at “new” status for over 24 months.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

Monitoring of “new” and “ready” status is discussed in the TENCO report. The list file as at 05/03/20 and the audit compliance reports for 1/03/18 to 29/02/20 were examined.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause.

Examination of the list file found that there are currently no ICPs at “new” status and no ICPs at “ready” status. There were no ICPs at “new” or “ready” status for over 24 months.

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 registry list as at 05/03/20 was examined to determine compliance.

Audit commentary

Review of the registry list confirmed that no embedded generation is connected.

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

Sub-clause (4) states that no participant may electrically connect a point of connection without the permission of the Reconciliation Participant.

The registry list as at 05/03/20 was reviewed to determine compliance.

Audit commentary

NZAL obtains permission from the trader before electrically connecting ICPs, as discussed in **section 3.2**.

Review of the registry list confirmed that no unmetered load is connected, apart from residual load ICPs. NZAL does not intend to connect any other unmetered load to the network in the future.

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 3 business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or 3 business days after the distributor has decommissioned the ICP.

Audit observation

The management of this process is discussed in the TENCO report. I also examined the audit compliance reports for the period from 01/03/18 to 29/02/20 to identify late updates.

Audit commentary

Analysis of the audit compliance reports identified the following:

Address events

There were ten address events during the audit period; all 10 (100%) were updated within one business day.

Network Events

There were 34 network events during the audit period, excluding initial electrical connection date updates; all except one were updated within one business day.

Initial electrical connection date updates are discussed in **section 3.5**.

Pricing Events

There were 53 pricing events during the audit period; all 53 (100%) were updated within three business days.

Status Events

There was one ICP decommissioned during the audit period. This was updated within three business days of the trader making it ready for decommissioning.

NSP changes

No NSP changes occurred during the report period.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|--|--|-----------------|------------------------|
| Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Mar-18 To: 05-Mar-20 | One late Network event. Potential impact: Low Actual impact: Low Audit history: Three times previously Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | Controls are rated as strong, as they are sufficient to ensure updates are on time most of the time. The risk is low as a there was only one late event. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| This was User error. There was no impact on the market as the ICP was never Active | | 21/4/2020 | Cleared |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| User training | | 21/4/2020 | |

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 management of this process is discussed in the TENCO report.

The registry list as at 5/03/20 and NSP table were compared to determine compliance.

I checked the audit compliance reports for the period from 01/03/18 to 29/02/20 to identify discrepancies.

Audit commentary

Compliance is recorded for TENCO.

I compared the registry list and NSP table and confirmed that all active ICPs were mapped to an NSP consistent with the ICP address information.

There were no discrepancies identified by the audit compliance reports.

Audit outcome

Compliant

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

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

Audit observation

The management of customer queries was examined.

Audit commentary

NZAL occasionally receives direct requests for ICP identifiers. These are provided immediately, by looking up the ICP based on information that the customer provides.

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 manage address accuracy was examined in the TENCO report. The registry list file as at 31/08/2017 was reviewed.

Audit commentary

Review of NZAL's list file found that all active and inactive ICPs have unique addresses with sufficient information to allow the ICPs to be readily located.

Two ICPs with duplicate addresses were identified. These have been passed to TENCO to correct.

Audit outcome

Non-compliant

| Non-compliance | Description |
|----------------|-------------|
|----------------|-------------|

| | | | |
|--|---|------------------------|-------------------------------|
| Audit Ref: 4.4 With: Clause 2 Schedule 11.1 From: 01-Mar-18 To: 05-Mar-20 | The list file showed two duplicate addresses. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | Controls are rated as strong, as they are sufficient to ensure addresses are unique most of the time. The duplicate addresses were entered at the retailer's request. The risk is low as a small number of ICPs are affected, and the registry has been updated. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| One address updated in Registry and now both unique. | | 21/4/2020 | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| To prevent recurrence of duplicate addresses TENCO intends to use regular SQL queries to verify addresses are unique | | In progress | |

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

Code reference

Clause 3 Schedule 11.1

Code related audit information

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

Audit observation

The management of this process is discussed in the TENCO report.

Audit commentary

Compliance is recorded for TENCO.

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

Processes to ensure information is accurate were examined during the TENCO agent audit. The audit compliance reports for the period from 01/03/18 to 29/02/20 were examined to check for the population of all required information.

I confirmed that all ICPs initially electrically connected by NZAL after 29/08/13 had an initial electrical connection date populated.

Audit commentary

Data completeness and accuracy was reviewed and confirmed to be compliant.

Audit outcome

Compliant

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

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

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

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

Audit observation

The management of this process is discussed in the TENCO report.

The registry list as at 5/03/20 and event detail report for 01/03/18 to 5/03/20 were reviewed to identify all new connections during the period and check that pricing information was provided as required by this clause.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause.

As discussed in **section 3.4**, all ICPs had pricing information recorded on the registry prior to initial electrical connection.

Audit outcome

Compliant

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

Code reference

Clause 7(8) and (9) Schedule 11.1

Code related audit information

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

Audit observation

The registry list as at 5/03/20 was examined to confirm compliance.

Audit commentary

NZAL do not populate GPS co-ordinates on the registry.

Audit outcome

Compliant

4.9. Management of “ready” status (Clause 14 Schedule 11.1)

Code reference

Clause 14 Schedule 11.1

Code related audit information

The ICP status of “Ready” must be managed by the distributor and indicates that:

- *the associated electrical installations are ready for connecting to the electricity supply (Clause 14(1)(a) of Schedule 11.1); or*
- *the ICP is ready for activation by a trader (Clause 14(1)(b) of Schedule 11.1)*

Before an ICP is given the “Ready” status in accordance with Clause 14(1) of Schedule 11.1, the distributor must:

- *identify the trader that has taken responsibility for the ICP (Clause 14(2)(a) of Schedule 11.1)*
- *ensure the ICP has a single price category (Clause 14(2)(b) of Schedule 11.1).*

Audit observation

Processes to manage ICPs at “ready” status were reviewed as part of the TENCO agent audit.

The registry list from 01/03/18 to 5/03/20 was reviewed to identify that all ICPs at “ready” status had a nominated trader and a single price category recorded.

Audit commentary

Analysis of the registry list confirmed that there were no ICPs at “ready” status. All ICPs that have been at the “ready” status were confirmed to have had a nominated trader and a single price category recorded.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.1

Code related audit information

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

Audit observation

The registry list for 01/03/18 to 5/03/20 was reviewed to identify any ICPs at distributor status.

Audit commentary

The distributor status was not used at all during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 20 Schedule 11.1

Code related audit information

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

Decommissioning only occurs when:

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

Audit observation

The management of this process is discussed in the TENCO report. The registry list as at 5/03/20, and event detail report for 01/03/18 to 5/03/20 were reviewed to determine compliance.

Audit commentary

Compliance is recorded in the TENCO audit report in relation to this clause.

One ICP was decommissioned during the report period, and the registry was updated in accordance with this clause. The timeliness of updates to decommissioned status are discussed in **section 4.1**.

No ICPs are currently at “ready for decommissioning” status.

Audit outcome

Compliant

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

Code reference

Clause 23 Schedule 11.1

Code related audit information

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

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

A price category code takes effect on the specified date.

Audit observation

The price category code table on the registry was examined.

Audit commentary

No price categories were created during the audit period.

Audit outcome

Compliant

5. CREATION AND MAINTENANCE OF LOSS FACTORS

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

Code reference

Clause 21 Schedule 11.1

Code related audit information

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

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

A loss category code takes effect on the specified date.

Audit observation

The loss category code table on the registry was examined.

Audit commentary

Two new loss category codes were created during the audit period as detailed below:

| Loss factor | Start date |
|-------------|------------|
| LNZALL6 | 1/07/2019 |
| LNZALL7 | 1/10/2019 |

Both were notified two months in advance of coming into effect.

Audit outcome

Compliant

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

Each loss category code must have a maximum of two loss factors per calendar month. Each loss factor must cover a range of trading periods within that month so that all trading periods have a single applicable loss factor.

If the distributor wishes to replace an existing loss factor on the table in the registry, the distributor must enter the replaced loss factor on the table in the registry.

Audit observation

The loss category code table on the registry was examined.

Audit commentary

NZAL updated the loss factor value for the following code during the audit period in accordance with this clause:

| Loss factor | Updated from |
|-------------|--------------|
| LNZALL1 | 29/04/19 |

There was a maximum of one loss factor per loss factor category code per month, and all trading periods had a single applicable loss factor.

Audit outcome

Compliant

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

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

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

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No NSPs were decommissioned, and no NSPs transferred from NZAL to other networks during the audit period.

Two new NSPs were created during the audit period:

| NSP | Start date |
|---------|------------|
| NAT0011 | 1/02/2018 |
| NBS0011 | 1/03/2019 |

Written notice was provided to all parties as required by this clause.

Four existing NSPs were assigned new start dates during the audit period. TENCO advised the reasons for the changes as follows:

| NSP | New start date | Reason for change |
|---------|----------------|----------------------|
| NT00011 | 14/09/18 | change of parent POC |
| NPP0011 | 1/03/19 | Trader change |
| NPS0011 | 1/03/19 | Trader change |
| NUL0011 | 1/03/19 | Trader 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 on the registry was examined.

Audit commentary

Two new NSPs were created during the audit period:

| NSP | Start date |
|---------|------------|
| NAT0011 | 1/02/2018 |
| NBS0011 | 1/03/2019 |

Requests to create NSP identifiers were provided to the RM as required by this clause.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

Two new NSPs were created during the audit period, and correct balancing area information was provided in accordance with this clause.

| NSP | Start date | Balancing area |
|---------|------------|----------------|
| NAT0011 | 1/02/2018 | NAT0011NZALE |
| NBS0011 | 1/03/2019 | NBS0011NZALE |

Audit outcome

Compliant

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table and the registry list for 01/03/18 to 5/03/20 were examined. Notifications were reviewed.

Audit commentary

Two new NSPs were created during the audit period:

| NSP | Start date |
|---------|------------|
| NAT0011 | 1/02/2018 |
| NBS0011 | 1/03/2019 |

TENCO supplied the correct information to the reconciliation manager as required by this clause.

Audit outcome

Compliant

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

Code reference

Clause 24(2) and (3) Schedule 11.1

Code related audit information

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No balancing areas were changed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 27 Schedule 11.1

Code related audit information

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No existing ICPs became NSPs during the audit period; compliance was not assessed.

Audit outcome

Compliant

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

Code reference

Clause 1 to 4 Schedule 11.2

Code related audit information

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

Audit observation

The NSP table and the registry list for 01/03/18 to 5/03/20 were examined.

Audit commentary

28 ICPs were transferred from other networks during the audit period. TENCO provided the required notification.

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

Processes to ensure that meters are present and certified were reviewed as part of the TENCO agent audit.

The NSP table was examined, and notifications were reviewed.

Audit commentary

Compliance is recorded for TENCO.

The NSP table was reviewed:

The NSP supply point table was reviewed

| Distributor | NSP POC | Description | MEP | Certification Expiry |
|-------------|---------|----------------------------------|------|----------------------|
| NZAL | NAH0011 | 139 THE TERRACE ASTERON HOUSE | AMCI | 7/05/2028 |
| NZAL | NAT0011 | 500 VICTORIA STREET HAMILTON | AMCI | 13/01/2028 |
| NZAL | NBS0011 | 10 BRANDON STREET WELLINGTON | AMCI | 8/01/2025 |
| NZAL | NPP0011 | PRIME PROPERTY TOWER | FCLM | 15/01/2023 |
| NZAL | NPS0011 | NZAL PSIS BUILDING | AMCI | 6/09/2020 |
| NZAL | NSR0011 | 81 MOLESWORTH STREET | AMCI | 20/08/2023 |
| NZAL | NT00011 | TECHNOLOGY ONE HOUSE | FCLM | 26/07/2026 |
| NZAL | NUL0011 | 498 JACKSON ST PETONE WELLINGTON | AMCI | 12/04/2021 |
| NZAL | NWH0011 | WEL HOUSE | FCLM | 7/07/2026 |

All NSPs have certified metering installations. The metering installations for NPP0011, NPS0011, NTO0011 and NWH0011 were recertified during the audit period. The reconciliation manager was advised of the metering installation certification expiry dates later than 20 business days for NPS0011 and NWH0011.

TENCO submitted a code change request on 29/05/19, asking the Authority to consider including embedded network gate meter details on the registry, so that the MEP can maintain these details. The request is under consideration.

Audit outcome

Non-compliant

| Non-compliance | Description |
|--|--|
| Audit Ref: 6.8 With: Clause 10.25(1) and 10.25(3) From: 08-Jan-20 To: 05-Mar-20 | The meter installation certification expiry date advised late for NSPs NPS0011 and NWH0011. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1 |
| Audit risk rating | Rationale for audit risk rating |

| Low | <p>The controls are rated as strong, as they are sufficient to ensure updates are on time most of the time.</p> <p>The impact on settlement and participants is minor; therefore, the audit risk rating is low.</p> | | |
|---|---|-----------------|------------------------|
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Recertification details have been entered and advised to the Reconciliation manager | | Various | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| <p>Ongoing monitoring of recertifications required by MEP through dashboards and a weekly check with an escalation mechanism to expedite receipt if required.</p> <p>Also code change request to Authority as noted above</p> | | On going | |

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

Processes to ensure that meters are present and certified were reviewed as part of the TENCO agent audit.

The NSP table was examined, and notifications were reviewed.

Audit commentary

Compliance is recorded for TENCO.

Two new NSPs were created during the audit period:

| NSP | NSP start date |
|---------|----------------|
| NAT0011 | 1/02/2018 |
| NBS0011 | 1/10/2018 |

The reconciliation manager was advised of the metering installation certification expiry date for NSP NBS0011 after 23 business days. The information for NAT0011 was provided within the required timeframe.

Audit outcome

Non-compliant

| Non-compliance | Description | | |
|---|--|-----------------|------------------------|
| Audit Ref: 6.9 With: Clause 10.25(2) From: 08-Jan-20 To: 05-Mar-20 | The meter installation certification expiry date advised after 31 days for NSP NBS0011. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1 | | |
| Audit risk rating | Rationale for audit risk rating | | |
| Low | The controls are rated as strong, as they are sufficient to ensure updates are on time most of the time. The impact on settlement and participants is minor; therefore, the audit risk rating is low. | | |
| Actions taken to resolve the issue | | Completion date | Remedial action status |
| Meter certification details have been entered and advised to the Reconciliation manager | | Various | Identified |
| Preventative actions taken to ensure no further issues will occur | | Completion date | |
| Monitoring of certificate request dates using workflows and system Dashboard. Monitoring MEP certificate delivery timeliness. | | On going | |

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

NZAL has not acquired any networks.

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 management of this process is discussed in the TENCO report. The Network Supply Points table was examined to determine whether there have been any MEP changes during the audit period.

Audit commentary

There have been no MEP changes during the audit period.

Audit outcome

Compliant

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

Code reference

Clauses 5 and 8 Schedule 11.2

Code related audit information

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

- the distributor whose network is associated with the NSP to which the ICP is recorded as being connected immediately before the notification (unless the notification relates to the creation of an embedded network) (Clause 5(a) of Schedule 11.2)

- every trader trading at an ICP being supplied from the NSP to which the notification relates (Clause 5(b) of Schedule 11.2).

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

Two new embedded networks were created during the audit period. The ICPs for both were transferred from the parent network. The trader approvals for these to be transferred were provided.

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 on the registry was examined.

Audit observation

NZAL has not acquired any networks.

Audit outcome

Compliant

7. MAINTENANCE OF SHARED UNMETERED LOAD

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

Code reference

Clause 11.14(2) and (4)

Code related audit information

The distributor must give written notice to the registry manager and each trader responsible for the ICPs across which the unmetered load is shared of the ICP identifiers of those ICPs.

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

Audit observation

The registry list for 01/03/18 to 5/3/20 was examined to determine compliance.

Audit commentary

Examination of the registry list confirmed that no shared unmetered load is connected.

Audit outcome

Compliant

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

Code reference

Clause 11.14(5)

Code related audit information

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

Audit observation

The registry list with history for 01/03/18 to 5/3/20 was examined to determine compliance.

Audit commentary

Examination of the registry list confirmed that no shared unmetered load is connected; compliance was not assessed.

Audit outcome

Compliant

8. CALCULATION OF LOSS FACTORS

8.1. Creation of loss factors (Clause 11.2)

Code reference

Clause 11.2

Code related audit information

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

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

Audit observation

The calculation of loss factors is discussed in the TENCO report.

Audit commentary

Compliance is recorded for TENCO, and I confirmed that there have been no changes to this process since the last TENCO audit.

TENCO derives loss factors for loss category codes from the published parent network loss factors for similar installations. It is expected that ICPs on embedded networks will have the same loss factor as a similar type of connection on the parent network.

To do this, TENCO determines the gateway loss factor from the LE ICP's loss factor, then determines the local network loss factor which would be likely to apply to the embedded network ICPs if they were connected to the local network. TENCO then calculates the overall loss factor and multiplies this by the local network loss factor to determine the value for each embedded network loss factor code.

TENCO maintains the internal loss factors in the registry, and within their pricing schedules which are issued to retailers.

I stepped through the process and confirmed that the loss factors were calculated and assigned as expected.

Audit commentary

Compliant

CONCLUSION

NZAL's compliance is reliant on the compliance of TENCO, as the contractor. In this report, I have only recorded those matters where issues were discovered or where specific analysis was undertaken. TENCO's audit report will be submitted with this report.

The audit found six non-compliances, and no recommendations were made.

The next audit frequency table indicates that the next audit be due in 18 months but due to the strong controls and minor nature of the non-compliances found in place I recommend that the next audit be in 24 months.

PARTICIPANT RESPONSE

Tenco on behalf of NZAL have reviewed the above audit report on the 21/04/2020 and agree with the findings contained within it.