

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**



For

SOUTH CITY HOLDINGS LIMITED

Prepared by: Tara Gannon

Date audit commenced: 26 September 2017

Date audit report completed: 30 November 2017

Audit report due date: 11 January 2018

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	6
1.3. Persons involved in this audit	6
1.4. Use of contractors (Clause 11.2A)	6
1.5. Supplier list	7
1.6. Hardware and Software	7
1.7. Breaches or Breach Allegations	7
1.8. ICP and NSP Data	7
1.9. Authorisation Received	8
1.10. Scope of Audit	8
1.11. Summary of previous audit	9
2. Operational Infrastructure	10
2.1. Requirement to provide complete and accurate information (Clause 11.2(1) and 10.6(1))	10
2.2. Requirement to correct errors (Clause 11.2(2) and 10.6(2))	10
3. Creation of ICPs	11
3.1. Distributors must create ICPs (Clause 11.4)	11
3.2. Participants may request distributors to create ICPs (Clause 11.5(3))	11
3.3. Provision of ICP Information to the registry manager (Clause 11.7)	11
3.4. Timeliness of Provision of ICP Information to the registry manager (Clause 7(2) of Schedule 11.1)	12
3.5. Timeliness of Provision of Initial Electrical Connection Date (Clause 7(2A) of Schedule 11.1)	12
3.6. Connection of ICP that is not an NSP (Clause 11.17)	13
3.7. Connection of ICP that is not an NSP (Clause 10.31)	13
3.8. Temporary electrical connection of ICP that is not an NSP (Clause 10.31A)	14
3.9. Connection of NSP that is not point of connection to grid (Clause 10.30)	14
3.10. Temporary electrical connection of NSP that is not point of connection to grid (Clause 10.30(A))	15
3.11. Definition of ICP identifier (Clause 1(1) Schedule 11.1)	15
3.12. Loss category (Clause 6 Schedule 11.1)	16
3.13. Management of “new” status (Clause 13 Schedule 11.1)	16
3.14. Monitoring of “new” & “ready” statuses (Clause 15 Schedule 11.1)	16
3.15. Embedded generation loss category (Clause 7(6) Schedule 11.1)	17
4. Maintenance of registry information	18
4.1. Changes to registry information (Clause 8 Schedule 11.1)	18
4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)	18
4.3. Customer queries about ICP (Clause 11.31)	19

4.4.	ICP location address (Clause 2 Schedule 11.1)	19
4.5.	Electrically disconnecting an ICP (Clause 3 Schedule 11.1)	20
4.6.	Distributors to Provide ICP Information to the Registry manager (Clause 7(1) Schedule 11.1)	20
4.7.	Provision of information to registry after the trading of electricity at the ICP commences (Clause 7(3) Schedule 11.1)	21
4.8.	GPS coordinates (Clause 7(8) and (9) Schedule 11.1)	22
4.9.	Management of “ready” status (Clause 14 Schedule 11.1)	22
4.10.	Management of “distributor” status (Clause 16 Schedule 11.1)	23
4.11.	Management of “decommissioned” status (Clause 20 Schedule 11.1)	23
4.12.	Maintenance of price category codes (Clause 23 Schedule 11.1)	24
5.	Creation and maintenance of loss factors	25
5.1.	Updating table of loss category codes (Clause 21 Schedule 11.1)	25
5.2.	Updating loss factors (Clause 22 Schedule 11.1)	25
6.	Creation and maintenance of NSPs (including decommissioning of NSPs and transfer of ICPs)	26
6.1.	Creation and decommissioning of NSPs (Clause 11.8 and Clause 25 Schedule 11.1)	26
6.2.	Provision of NSP information (Clause 26(1) and (2) Schedule 11.1)	26
6.3.	Notice of balancing areas (Clause 24(1) and Clause 26(3) Schedule 11.1)	27
6.4.	Notice of supporting embedded network NSP information (Clause 26(4) Schedule 11.1)	27
6.5.	Maintenance of balancing area information (Clause 24(2) and (3) Schedule 11.1)	28
6.6.	Notice when an ICP becomes an NSP (Clause 27 Schedule 11.1)	28
6.7.	Notification of transfer of ICPs (Clause 1 to 4 Schedule 11.2)	28
6.8.	Responsibility for metering information for NSP that is not a POC to the grid (Clause 10.25(1) and 10.25(3))	29
6.9.	Responsibility for metering information when creating an NSP that is not a POC to the grid (Clause 10.25(2))	30
6.10.	Obligations concerning change in network owner (Clause 29 Schedule 11.1)	30
6.11.	Change of MEP for embedded network gate meter (Clause 10.22(1)(b))	31
6.12.	Confirmation of consent for transfer of ICPs (Clauses 5 and 8 Schedule 11.2)	31
6.13.	Transfer of ICPs for embedded network (Clause 6 Schedule 11.2)	32
7.	Maintenance of shared unmetered load	33
7.1.	Notification of shared unmetered load ICP list (Clause 11.14(2) and (4))	33
7.2.	Changes to shared unmetered load (Clause 11.14(5))	33
8.	Calculation of loss factors	34
8.1.	Creation of loss factors (Clause 11.2)	34
	Conclusion	35
	Non-compliances	35
	Recommendations	35
	Issues	35
	Participant response	36

EXECUTIVE SUMMARY

This Distributor audit was conducted at the request of **South City Holdings Limited (SCHL)** 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.

SCHL'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 compliance with all requirements, no recommendations were made, and one issue is raised.

The next audit frequency table indicates that the next audit be due in 36 months and I agree with this recommendation.

AUDIT SUMMARY

NON-COMPLIANCES

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	Issue	Description
Audit trails for NSP metering information	6.8	There is no audit trail for NSP metering updates via the RM portal.	I suggest the Electricity Authority investigate reporting on notification submission dates and times, so that compliance with these requirements can be assessed.

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 SCHL 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 SCHL.

1.2. Structure of Organisation

Not applicable

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
Eva Khudyakova	Service Delivery Manager	TENCO
Nick Price	General Manager	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 contractors 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 SCHL's responsibilities.

1.5. Supplier list

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

1.6. Hardware and Software

TENCO manages a database called END (Embedded Network Database), which contains all relevant embedded network data.

A spreadsheet is used to create ICP identifiers. The checksum is created by the "checksum" tool provided by Vector.

Salesforce hosts all the ICP information, and registry information is imported daily. A daily registry validation is performed within Salesforce and any discrepancies are managed using the salesforce dashboard.

1.7. Breaches or Breach Allegations

SCHL 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 SCHL had the following NSP:

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
SCHL	MXS0011	South City Centre	ISL0661	ORON	MXS0011 SCHLE	E	01/04/2015	50

Status	Number of ICPs (2017)	Number of ICPs (2016)	Number of ICPs (2015)
New (999,0)	-	-	-
Ready (0,0)	-	-	-
Active (2,0)	48	48	50
Distributor (888,0)	-	-	-
Inactive – new connection in progress (1,12)	-	-	-

Inactive – electrically disconnected vacant property (1,4)	1	1	-
Inactive – electrically disconnected remotely by AMI meter (1,7)	-	-	-
Inactive – electrically disconnected at pole fuse (1,8)	-	-	-
Inactive – electrically disconnected due to meter disconnected (1,9)	-	-	-
Inactive – electrically disconnected at meter box fuse (1,10)	-	-	-
Inactive – electrically disconnected at meter box switch (1,11)	-	-	-
Inactive – electrically disconnected ready for decommissioning (1,6)	-	-	-
Inactive – reconciled elsewhere (1,5)	-	-	-
Decommissioned (3)	1	1	-

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 SCHL, to encompass the Electricity Industry Participation Code requirement for an annual 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.

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

SCHL provided a copy of their previous audit conducted in December 2016 by Rebecca Elliot of Veritek Limited. The audit recorded one non-compliance, which is described in the table below, and made no recommendations.

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Changes to Registry Information	3.1	8 of schedule 11.1	Backdating of registry events for one ICP	Cleared. No changes to registry information occurred during the audit period. Refer to section 4.1 .

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. I also examined a registry list file with history for 01/09/2016 - 31/08/2017 to confirm compliance.

Audit commentary

Compliance is recorded for TENCO. Examination of the list file confirmed compliance.

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 a number of 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 report. The registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

Compliance is recorded for TENCO. No new ICPs were created during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

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

Audit observation

The new connection process is discussed in the TENCO report. The registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

Compliance is recorded for TENCO. No new ICPs were created during the audit period.

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 new connection process is discussed in the TENCO report. The registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

Compliance is recorded for TENCO. No new ICPs were created during the audit 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 registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

The process followed by TENCO is compliant. No new ICPs were created during the audit period.

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 new connection process is discussed in the TENCO report. The registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

The process followed by TENCO is compliant. No new ICPs were created during the audit period.

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.

Audit observation

The new connection process is discussed in the TENCO report. The registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

Compliance is recorded for TENCO. Review of the registry list confirmed that a trader is recorded for all active and inactive ICPs, there are no new or ready ICPs. The registry list does not record any shared unmetered load.

Audit outcome

Compliant

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

Code reference

Clause 10.31

Code related audit information

A distributor must not connect an ICP that is not an NSP unless requested to do so by the trader trading at the ICP.

Audit observation

The new connection process is discussed in the TENCO report. The registry list as at 31/08/2017 was examined to determine compliance.

Audit commentary

TENCO will not electrically connect an ICP without a reconciliation participant accepting responsibility. Examination of the list file confirmed this.

Audit outcome

Compliant

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

Code reference

Clause 10.31A

Code related audit information

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

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

Audit observation

The new connection process is discussed in the TENCO report. The event detail file for 01/09/2016 - 31/08/2017, and the registry list were examined to determine compliance.

Audit commentary

TENCO's processes are robust in relation to this clause as an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. No ICPs were at ready status during the audit period.

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

No new NSPs have been connected during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

No new NSPs have been connected during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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 for TENCO. TENCO's END (Embedded Network Database) is used to create ICP identifiers and the checksum is created by the "checksum" tool provided by Vector.

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 31/08/2017 was examined to confirm whether all active ICPs have a single loss category code.

Audit commentary

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

Audit outcome

Compliant

3.13. 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 is discussed in the TENCO report. The registry list file with history and event detail report for 01/09/2016 - 31/08/2017 were examined.

Audit commentary

Compliance is recorded for TENCO. No new ICPs were created during the audit period.

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 31/8/17 was examined.

Audit commentary

Compliance is recorded for TENCO. Examination of the list file found no ICPs at new or ready status.

Audit outcome

Compliant

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

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

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

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

Audit observation

The list file as at 31/8/17 was examined.

Audit commentary

SCHL does not supply any embedded generators; compliance was not assessed.

Audit outcome

Not applicable

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 14 days, the time within which notification must be effected in accordance with Clause 8(3) of Schedule 11.1 begins on the 15th day after the change.

Audit observation

The management of this process is discussed in the TENCO report. I also examined the event detail report for 01/09/2016 – 31/08/2017 to identify late changes to registry information during the audit period.

Audit commentary

The event detail report was analysed and found:

Address events

There were no address events during the audit period.

Network Events

There were no network events during the audit period.

Pricing Events

There were no pricing events during the audit period.

Status Events

There were no status events during the audit period.

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 management of this process is discussed in the TENCO report. I also examined the registry list with history for 01/09/2016 – 31/08/2017 to identify all ICPs which had a change of NSP during the audit period.

Audit commentary

Compliance is recorded for TENCO. Review of the registry list with history found no ICPs which had a change of NSP during the audit period.

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

TENCO, on behalf of SCHL, 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 SCHL's list file found that all active and inactive ICPs have unique addresses with sufficient information to allow the ICPs to be readily located. There were no duplicate addresses.

Audit outcome

Compliant

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

Code reference

Clause 3 Schedule 11.1

Code related audit information

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

Audit observation

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

Audit observation

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

The list file as at 31/08/2017 was examined to the population of all required information and its alignment with the trader where appropriate e.g. distributed generation, unmetered load, and shared unmetered load.

Audit commentary

The process followed by TENCO is compliant. Examination of the list file confirmed that ICP information had been populated correctly. There has been no unmetered load, or embedded generation added during the audit period. No new connections were completed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

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

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

Audit observation

The management of this process is discussed in the TENCO report. The registry list file with history for 01/09/2016 - 31/08/2017 was examined.

Audit commentary

The process followed by TENCO is compliant. No new ICPs were created during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 7(8) and (9) Schedule 11.1

Code related audit information

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

Audit observation

The registry list as at 31/07/2017 was examined.

Audit commentary

SCHL do not populate GPS co-ordinates on the registry; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 14 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The management of this process is discussed in the TENCO report. The list file and event detail report for 01/09/2016 – 31/08/2017 were examined in relation to the use of the ready status.

Audit commentary

Compliance is recorded for TENCO. The list file does not show any ICPs currently at the new or ready status.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.1

Code related audit information

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

Audit observation

It is unlikely that SCHL will deal with any ICPs with a “Distributor” status because they do not deal with shared unmetered load, and there are no embedded networks connected to existing embedded networks.

The registry list file for 01/09/2016 – 31/08/2017 was examined in relation to the use of the distributor status.

Audit commentary

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

Audit outcome

Not applicable

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 list file and event detail report for 01/09/2016 – 31/08/2017 were examined in relation to the use of the decommissioned status.

Audit commentary

Compliance is recorded for TENCO. No ICPs were decommissioned during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 23 Schedule 11.1

Code related audit information

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

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

A price category code takes effect on the specified date.

Audit observation

The price category code table on the registry was examined.

Audit commentary

SCHL has not created any new price category codes during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

SCHL has not created any new loss category codes during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

SCHL has not updated or replaced any loss factor codes during the audit period. There was only one loss factor per loss factor category code per month.

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 created or decommissioned during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

No NSPs were created or transferred during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

No balancing areas were created during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table on the registry and the registry list with history for 01/09/2016 – 31/08/2017 were examined to determine compliance.

Audit commentary

No NSPs were created during the audit period, and no ICPs had a change of NSP during the audit period. Compliance was not assessed.

Audit outcome

Not applicable

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; compliance was not assessed.

Audit outcome

Not applicable

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

Not applicable

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 on the registry was examined.

Audit commentary

SCHL has not acquired any new networks; compliance was not assessed.

Audit outcome

Not applicable

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 management of this process is discussed in the TENCO report. The NSP supply point table was examined.

Audit commentary

The process followed by TENCO is compliant. In November 2017, TENCO implemented process improvements to reduce the time to provide meter certification dates. AMCI will notify TENCO as soon as they complete a recertification. Previously, certification information was provided to TENCO on request, which could result in late notification where the MEP had certified or recertified a meter earlier than expected.

The NSP supply point table was reviewed:

Distributor	NSP POC	Description	MEP	Certification Expiry
SCHL	MXS0011	South City Centre	AMCI	18/10/2026

The NSP has a certified metering installation. The metering installation was recertified during the audit period.

Since May 2017, meter and certification details are entered via the RM portal and there is no audit trail available to prove when notification occurred. I have raised an issue in relation the process to notify updates to metering for NSPs to the Reconciliation Manager.

Description	Issue	Remedial action
Audit trails for NSP metering information	There is no audit trail for NSP metering updates via the RM portal.	I suggest the Electricity Authority investigate reporting on notification submission dates and times, so that compliance with these requirements can be assessed.

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 on the registry was examined.

Audit commentary

No NSPs were created during the audit period; compliance was not assessed.

Audit outcome

Not applicable

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

Code reference

Clause 29 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

SCHL has not acquired any networks; compliance was not assessed.

Audit outcome

Not applicable

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

Not applicable

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

SCHL has not acquired any networks; compliance was not assessed.

Audit outcome

Not applicable

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

SCHL has not acquired any networks; compliance was not assessed.

Audit outcome

Not applicable

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 with history for 01/09/2016 – 31/08/2017 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

Not applicable

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 01/09/2016 – 31/08/2017 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

Not applicable

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. 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. All loss factors checked during TENCO's audit were correct.

Audit commentary

Compliant

CONCLUSION

SCHL'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 compliance with all requirements, no recommendations were made, and one issue is raised.

The next audit frequency table indicates that the next audit be due in 36 months and I agree with this recommendation.

NON-COMPLIANCES

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	Issue	Description
Audit trails for NSP metering information	6.8	There is no audit trail for NSP metering updates via the RM portal.	I suggest the Electricity Authority investigate reporting on notification submission dates and times, so that compliance with these requirements can be assessed.

PARTICIPANT RESPONSE

TENCO on behalf of SCHL have reviewed the report on the 4/12/2017 and agree with the findings of the audit.