ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT

For

ELECTRA

Prepared by: Ewa Glowacka

Date audit commenced: 26 April 2018

Date audit report completed: 25 May 2018

Audit report due date: 28-May-18

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EXECUTIVE SUMMARY

This distributor audit was performed at the request of Electra(ELEC) as required by clause 11.10 of Part 11, to assure compliance with the Electricity Industry Participation Code 2010. The relevant rules audited are as required by the Guidelines for Distributor Audits V7.0 issued by the Electricity Authority

The audit found 8 non-compliances and one recommendation. The level of compliance has improved in the following areas:

- Population of Initial Electrical Connection Date
- Accuracy of uploading information for new ICPs and using correct ICP status

The main issues identified during this audit are:

- Management of the registry updates
- Embedded generation– update from contractors when solar is connected
- ICP location addresses

One recommendation was made in this report:

- Attend the registry training run by the Authority and re-assess registry information updates via the registry web interface using a single login used by a number of people

The date of the next audit is determined by the Electricity Authority and is dependent on the level of compliance during this audit. Table 1 of the Guidelines for Reconciliation Participant audit provides some guidance on this matter. The Future Risk Rating score is 18 which results in an indicative audit frequency of 12 months. We agree with the result.

We thank Electra's staff for their full and complete cooperation in this audit. Their response to any request for information or clarification was answered in a timely manner and each time in depth, supporting evidence was provided.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Requirement to provide complete and accurate information	2.1	11.2(1)	Some information in the registry still must be corrected or populated	Moderate	Low	2	Identified
Requirement to correct errors	2.2	11.2(2)	Incorrect data is corrected but, in some cases, it is identified late and results in backdating transactions in the registry	Moderate	Low	2	Identified
Timeliness of provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	The Initial Electrical Connection Date was not recorded before 10 business days in the registry for 215 (88.8%) new connection ICPs created since the last audit	Moderate	Low	2	Identified
Changes to registry information	4.1	8 of Schedule 11.1	Some updates to network, pricing information were done later than 3BD.	Moderate	Weak	3	Identified
Notice of NSP for each ICP	4.2	7(4) of Schedule 11.1	22 ICPs had incorrect NSP assigned	Moderate	Low	2	Identified
ICP location address	4.4	2 of Schedule 11.1	For 469 ICPs the address descriptions do not allow ICPs to be readily located	Weak	Low	3	Identified
Distributor to provide ICP information to the registry manager	4.6	7(1) of Schedule 11.1	Incorrect or missing information in the registry for UML, Initial Electrical Connection Date, NSPs	Moderate	Low	2	Identified

Management of "decommissioning" status	4.11	20 of Schedule 11.1	The date of notification from trader of decommissioning is used as an event date instead an actual date when equipment was physically removed.	Moderate	Low	2	Identified
Future Risk Rating						18	

Future risk rating	0-1	2-5	6-8	9-20	21-29	30+
Indicative audit frequency	36 months	24 months	18 months	12months	6 months	3 months

RECOMMENDATIONS

Subject	Section	Recommendation	Description
Changes to registry information	4.1	Attend the registry training run by the Authority	Some updates in the registry are done using the web interface. The same login is used by a number of people therefore it is difficult to assess which person requires additional training. It appears that there is not enough understanding of the importance of the Event Date for each update.

ISSUES

Subject	Section	Issue	Description

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.

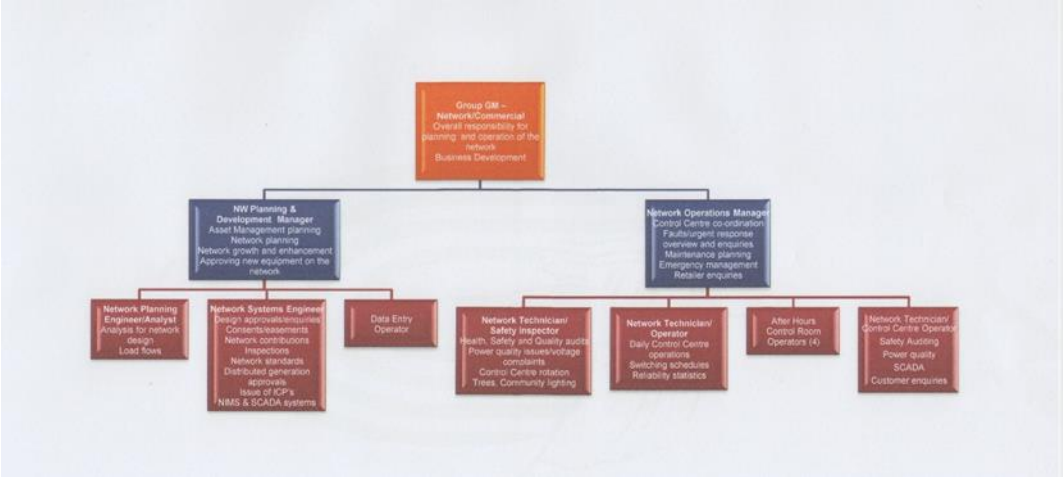
Audit observation

It was discussed with Electra and it was confirmed that there are no exemptions in place which are relevant to the scope of this audit.

Audit commentary

We checked the Electricity Authority website and confirm that there are no exemptions in place.

1.2. Structure of Organisation



1.3. Persons involved in this audit

Name	Title	Company
Mark Branagh	Network Engineer	Electra
Ewa Glowacka	Electricity Authority Approved Auditor	TEG & Associates Ltd

1.4. Use of contractors (Clause 11.2A)

Code reference

Clause 11.2A

Code related audit information

A participant who uses a contractor

- *remains responsible for the contractor's fulfilment of the participants Code obligations*

- *cannot assert that it is not responsible or liable for the obligation due to the action of a contractor*
- *must ensure that the contractor has at least the specified level of skill, expertise, experience, or qualification that the participant would be required to have if it were performing the obligation itself*

Audit observation

There are no contractors who assist with, or are used in, the Electra operations that were audited.

Audit commentary

During the audit, we did not identify any contractors which assist Electra to meet their obligations relevant to the scope of this audit.

1.5. Supplier list

WindMil software is provided by Milsoft Utility Solutions.

1.6. Hardware and Software

WindMil is used to store information about network configurations and the location of ICPs.

1.7. Breaches or Breach Allegations

No breaches or alleged breaches were recorded.

1.8. ICP and NSP Data

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
ELEC	MHO0331	MANGAHAO			MHO0331ELECGN	GN	1/05/11	
ELEC	PRM0331	PARAPARAUMU			PRM0331ELECGN	GN	1/05/08	

Electra provided the LIS file dated 16 April 2018. Total number of ICPs was 48,601.

Status	Number of ICPs (16/04/2018)	Number of ICPs (23/08/2017)	Number of ICPs (2016)
Active (2,0)	44,602	44,305	43,826
Inactive- new connection in progress (1,12)	40	22	17
Inactive – vacant (1,4)	768	776	771
Inactive – AMI remote disconnection (1,7)	66	78	83
Inactive – at pole fuse (1,8)	3	2	2
Inactive – de-energised due to meter disconnected (1,9)	8	5	1

Inactive – de-energised at meter box switch (1,10)	1	0	0
Inactive- at meter box switch (1,11)	0	0	0
Inactive – ready for decommissioning (1,6)	386	332	283
Inactive – reconciled elsewhere (1,5)	0	0	0
Decommissioned (3)	2,136	2,120	2,090
New (999)	4	12	11
Ready (0)	47	61	49

1.9. Authorisation Received

Electra provided a letter of authorisation to the auditors permitting the collection of data from other parties for matters directly related to the audit.

1.10. Scope of Audit

The audit covers the following processes under clause 16A.23 of Part 16A, performed by Electra, as listed below:

- (a) -The creation of ICP identifiers for ICPs
- (b) -The provision of ICP information to the registry and the maintenance of that information
- (c) - The creation and maintenance of loss factors

The audit was carried out on the Electra premises, at cnr Bristol Street & Exeter Street in Levin, on the 26/27 April 2018. We have followed the Guidelines for Distributor Audits version 7.0, published by the Authority, as at the report date.

1.11. Summary of previous audit

The previous audit was conducted in October 2017 by Ewa Glowacka of TEG & Associates. A number of non-compliances were identified. They are listed below:

Subject	Section	Clause	Non-Compliance	Comment
Audit required if participant makes material changes	**Error! Reference source not found.**	16A.11	NIMS was replaced by WindMil, which does not have an interface to the registry. A significant impact on processes covered by this audit	N/A
Requirement to provide complete and accurate information	**Error! Reference source not found.**	11.2(1)	Some information in registry still must be corrected or populated	Still exists
Requirements to correct errors	**Error! Reference source**	11.2(2)	Incorrect data is corrected but, in some cases, it is identified late, it results in backdating transactions in	Still exists

	not found.		the registry. There is no structured process yet	
Timeliness of provision of ICP information to the registry manager	**Error! Reference source not found.**	7(2) of Schedule 11.1	2 ICPs were not uploaded to the registry prior to electricity being traded at the ICP	Cleared
Timeliness of provision of Initial Electrical Connection Date	**Error! Reference source not found.**	7(2A) of Schedule 11.1	The Initial Electrical Connection Date was not recorded in the registry for any new connections before 10 business days as required	Still exists
Connection of ICPs which is not an NSP	**Error! Reference source not found.**	11.17	5 ICPs were connected without traders being recorded as accepting responsibility in the registry	Cleared
Embedded generation loss category	**Error! Reference source not found.**	7(6) of Schedule 11.1	Incorrect Loss Factor Code for Mangahao Power Station recorded in the registry caused King Country Energy to purchase an additional 7,400 (approx.) units of electricity per year	Cleared
Changes to registry information	**Error! Reference source not found.**	8 of Schedule 11.1	Some updates to network, pricing information and the "decommissioning" status in the registry were done later than 3BD.	Still exists
ICP location address	**Error! Reference source not found.**	2 of Schedule 11.1	For nearly 400 ICPs the address descriptions do not allow ICPs to be readily located	Still exists
Distributor to provide ICP information to the registry manager	**Error! Reference source not found.**	7(1) of schedule 11.1	Incorrect or missing information in the registry for UML, Initial Electrical Connection Date, NSPs	Still exists

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

We analysed the LIS file and PR-255 provided by Electra. In section 4.7 we noted that some information in the registry was incorrect.

Audit commentary

The new connection process is good. The registry is mostly correctly populated. There is still some historic information which needs to be corrected, such as location addresses, ICPs assignment to NSPs, lack of information for embedded generation. We confirm that an effort is made to have information complete and accurate, more tools have been developed since the last audit, but more tools must be developed. The interface between WindMil and the registry has been implemented.

Before this report finalised, Electra provided a new LIS file as a evidence that ICPs assignment to NSPs was corrected, missing information about embedded generation was populated and some

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: 11.2(1) From: 16-Aug-17 To: 15-Apr-18	Some information in the registry still must be corrected or populated Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	We recorded controls as moderate. The level of compliance has improved since the last audit, the company is working towards improving the quality of information. Audit risk rating is assessed as low because Electra pursue data correction. Minor impact on settlement outcomes.

Actions taken to resolve the issue	Completion date	Remedial action status
Address correction an ongoing issue requiring potential site visits to correct.	ongoing	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
All new ICPs are entered with a unique locatable address, all address issues are historic	ongoing	

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

We did not observe a robust approach to maintaining the quality of data in the registry. It is more like a catch-up approach. There was still some incorrect information found in the registry during the audit.

Audit commentary

Some incorrect information found in the registry during the audit. Electra is in a process introducing processes to monitor data in the registry, but it is work in progress. We would like to record that such processes are being developed.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.2 With: 11.2(2) From: 16-Aug-17 To: 15-Apr-18	Incorrect data is corrected but, in some cases, it is identified late and results in backdating transactions in the registry Potential impact: Low Actual impact: Low Audit history: once previously Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are recorded as moderate because some processes are not fully developed. The electronic interface to the registry improved the quality of data. Audit risk rating is recorded as low because there is a minor impact on settlement outcomes.

Actions taken to resolve the issue	Completion date	Remedial action status
Data already corrected	ongoing	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
More emphasis placed on entering data correctly initially to save correcting it.	ongoing	

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

There are two types on new connections. A connection which can be connected without additional work being done by a network and a connection which requires additional cabling or line work to be done before the connection can occur.

For a connection that requires additional work, a customer first contacts the Electra Contracting Division, a quote is prepared, accepted by a customer, and a deposit paid. A chosen trader is contacted by a customer who requests Electra to create a new ICP.

For a basic connection, a customer contacts a chosen trader straight away, who then requests an ICP from Electra. Traders or their agents request a new ICP via emails; emails are archived. Electra does not have a

prescribed format for new network connection applications. The ICP is issued, loaded into the registry and advice is sent to a requesting trader via email.

Audit commentary

Electra maintains a spreadsheet in which it records details of new ICPs. The spreadsheet stores information about a customer such as address, what trader requested and when, date of ICP creation.

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

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

Audit observation

An ICP identifier is requested by a trader chosen by a customer or its agent. We randomly chose 10 requests for ICPs from traders to assess compliance.

Audit commentary

Electra maintains a spreadsheet in which it records new ICPs. The spreadsheet stores information about a customer such as address, what trader requested and when. Since the last audit Electra issued 300 new ICPs. We sampled 10 ICPs using judgement based methodology and confirm all of them were issued within 3 business days.

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

We reviewed the LIS and the EDA file for the period 06/08/17 to 15/04/18 to assess compliance. The new connection process was examined.

Audit commentary

Since the last audit, the upload of new ICPs to the registry has changed. It is not a manual process anymore. The new process requires the creation of a new connection in WindMil software and then an interface written internally allows it to upload information to the registry at 7pm every night.

Audit outcome

Compliant

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

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

The new connection process was examined. Non-compliance was recorded in the previous audit against this clause.

The EDA file for the period covered by this audit was examined. 300 ICPs were made "ready" during that period. No "new" status was used

Audit commentary

The registry is updated daily. A new interface to the registry was implemented at the beginning of April. We have chosen 20 ICPs using judgement based methodology and confirm that all ICP identifiers were created and uploaded before the commencement of trading. The current process is documented and the new interface to the registry is working well.

Audit outcome

Compliant

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

The EDA file for the period covered by this audit was reviewed to assess compliance.

Audit commentary

Our analysis showed that the Initial Electrical Connection Date for 215 ICP (88.8%) new connections, since the last audit, were uploaded to the registry later than 10 business days. The most backdated update was 108 business days.

It is another group of updates of the Initial Electrical Connection Date which relate to corrections of information identified during the last audit. There were 529 updates and they will be covered in section 4.1 because this information was previously in the registry, but it was deleted by Electra's system. It is seen as changes to the registry information.

There are two reasons for such a high percentage of late updates for new connections connected since the last audit. The first one is that for a number of years Electra was not receiving information from contractors who were electrically connecting installations. The second one is that, up to recently, WindMil

did not store the Initial Electrical Connection Date therefore it was populated manually. It was not a well-structured process and in most cases the date was not populated, or it was populated late.

After the last audit, Electra decided to change their processes. Firstly, since the beginning of April this year, once per week they receive updates from contractors. Secondly, after this audit identified issues, Electra added the field of Initial Electrical Connection Date to WindMil, so this field is picked up in the nightly update and uploaded to the registry. It also means that any new network updates to the registry will include the Initial Electrical Connection Date. The registry design requires a reload of all information, every time an update is sent. If it is not included, the registry will delete it. It was one of the main problems Electra was having with "vanishing" Initial Electrical Connection Dates.

Electra provided the most recent LIS file dated and we confirm that the new process is working well and gives desirable results.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 3.5 With: 7(2A) of Schedule 11.1 From: 16-Aug-17 To: 15-Apr-18	The Initial Electrical Connection Date was not recorded before 10 business days in the registry for 215 (88.8%) new connection ICPs, created since the last audit Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are recorded as moderate. Electra has changed the process and from 1/4/18, Electra requested contractors working on their network to notify them of any new connections being electrically connected. They also added a new field to WindMil to record the Initial Electrical Connection Date. The next audit should confirm that the new processes are working well. Population of Initial Electrical Connection date does not have any direct impact on settlement outcomes therefore audit risk rating is low.

Actions taken to resolve the issue	Completion date	Remedial action status
Updating IED		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Contractors to email weekly all properties livened and date livened to allow us to populate IED in the correct timeframes.	ongoing	

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 EDA file for the period covered by this audit was reviewed to assess compliance. The new connection process was examined.

Audit commentary

An ICP identifier is always requested by traders therefore a trader is always recorded in the registry as accepting responsibility for the ICP.

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

According to the new connection process, Electra issues an ICP on a trader's request. Once the ICP is issued a trader takes on the responsibility of connecting the ICP. All ICPs are loaded to the registry with the status "ready" which includes a proposed trader.

Audit commentary

Electra does not electrically connect new connections. It is done by contractors authorised to work on the Electra network, on traders' request. Since the beginning of this April, every week, contractors notified Electra which new connections were connected and electrically connected to their network. Both steps happen at the same time. Electricians are not allowed to connect a new installation to the network.

The new process allows Electra to populate the Initial Electrical Connection Date in the registry.

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

Electra does not electrically connect ICPs. It is done by contractors nominated by traders, who are authorised to work on their network.

Audit commentary

Electra does not electrically connect ICPs. It is done by contractors nominated by traders.

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 5 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

Electra does not have any NSP on its network that is not a point of connection to the grid.

Audit commentary

Compliance was not assessed because Electra does not have such NSPs.

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

Electra does not have any NSP on its network that is not a point of connection to the grid.

Audit commentary

Compliance was not assessed because Electra does not have such NSPs.

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:

yyyyyyyyyyxxccc where:

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

Audit observation

The process of the creation of ICPs was examined. We also examined the LIS file provided by Electra. There is a unique distributor code "EL" as part of each ICP Identifier on the Electra network.

Audit commentary

We reviewed the LIS file and the new connections spreadsheet and confirm compliance.

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

The LIS registry file dated 16/04/18 was examined. All ICPs have a single loss category assigned.

Audit commentary

We would like to note that the registry design prohibits the assigning of more than a single loss category code to an ICP.

Audit outcome

Compliant

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

Code reference

Clause 13 Schedule 11.1

Code related audit information

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

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

Audit observation

The new connection process was examined. Electra does not use the status "new". All new ICPs are loaded with all information which allows the registry to assign the status "ready".

Audit commentary

There are four ICPs with the status "new". They were loaded to the registry in previous years.

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

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

Audit observation

The LIS file was examined, and we confirm that, at the time of audit, three ICPs held the status "new", which were also created more than 24 months ago. The number of ICPs with the status of "Ready" is 10. The "oldest" ICP was created in 2014.

Audit commentary

Electra showed evidence of emails send to Contact requesting a confirmation that these ICPs are still required. There was no response from Contact.

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

We examined the LIS file dated 23 August 2017. Electra has an embedded generation station that has a capacity of 37 MW on its network. It is Mangahao Power Station, its ICP is 0110007806EL3CF.

Audit commentary

It was recorded as non-compliance during the last audit because Mangahao did not have a unique loss category code assigned. On 23/4/11 Electra uploaded the registry loss factor code MHO1 specifically for Mangahao Power Station but at some stage it was replaced by the loss factor code "1". The mistake was corrected during the last audit. We confirm that ICP 0110007806EL3CF has the correct loss factor code assigned.

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 3 business days after the change takes effect, unless the change is to the NSP identifier of the NSP to which the ICP is usually connected (other than a change that is the result of the commissioning or decommissioning of an NSP).

In those cases, notification must be given no later than 8 business days after the change takes effect.

If the change to the NSP identifier is for more than 14 days, the time within which notification must be affected in accordance with Clause 8(3) of Schedule 11.1 begins on the 15th day after the change.

Audit observation

We examined the EDA file for the period of 16/09/16 to 15/08/17 to assess compliance. The results are shown below:

Activity	No of updates	No of updates later than 3BD	Date range of updates [BD]	Comment
Address	513	130 (25.3%)	8 to 4918	Some backdated entries relate to late updates by City Council. Last time it was 14.6%
Network	529 changes to IECD for existing installations	521 (98.5%)	12 to 1522	
	205 (solar)	194 (94.6%)	12 to 4909	Entering information for newly installed solar or historic installations
	381 (others)	278 (73%)	5 to 4796	Updates to NSPs, UML
Pricing	1,438	973 (67.7%)	6 to 2495	New pricing introduced by Electra
Status (0)	300			
Status (999)	0			
Status (3)	8	8 (100%)	7 to 1444	In some cases, it is clean-up by traders or ICP is setup in error

Audit commentary

Addresses – The updates are done as the District Council forwards updates or a request comes from a trader. 36.2% of updates were done via the registry interface. The correction of addresses done manually goes back to the date of ICP creation. It was discussed with Electra and the comment was that, in some cases, the operator forgot to change the date and the registry used the date of the last recorded Event Date.

Pricing – This time the number of updates was higher than last year (191) due to an introduction of new pricing by Electra. The company receives requests from traders, but they are not sent regularly. The majority of price category code (94.4%) changes are done within 24 BD. The updates are done using the interface between WindMil and the registry or manually.

We noted that if updates are done via WindMil, it is backdated only to a maximum of 24BD. There were 918 such updates (63.8% of all updates since the last audit). The updates done using the registry web interface (520 updates which is 36.2%) are often backdated to the date of ICP creation, which can be many years ago

Electra has one login to the registry with full rights, which means it is difficult to identify, who updated what information. The registry does not have a specific field, which allows the operator to put additional comment. It appears that there is not enough understanding of the importance of the Event Date for each update.

Network - 529 updates of the Initial Energisation Date were for existing installations to re-enter information which "vanished" from the registry or incorrect information such as Initial Energisation Date for ICP prior 08/2013 or the date was related to an installation of embedded generation (solar).

There were no changes to the allocation of ICPs to NPSs for longer than 14 days.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: 8 of Schedule 11.1 From: 16-Aug-17 To: 15-Apr-18	Some updates to network, pricing information were done later than 3BD Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Weak Breach risk rating: 3
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are recorded as weak because up to the audit there was no well-defined process for updating the registry information. Changes to WindMil should improve the level of compliance but management of pricing updates and manual updates to the registry are weak points. Impact on settlement outcomes is minor therefore audit risk rating is recorded as low.

Actions taken to resolve the issue	Completion date	Remedial action status
Cannot resolve actions complete.		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Updating will continue as requested by the retailers.	ongoing	

Recommendation	Description	Audited party comment	Remedial action
Attend the registry training run by the Authority	Some updates in the registry are done using web interface. The same login is used by a number of people therefore it is difficult to assess which person requires additional training. It appears that there is not enough understanding of the importance of the Event Date for each update.	Agree, separate logins to be created for individuals and next time training available we will attend.	

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 LIS file and new connection process was examined. Electra has two NSPs on its network, PRM0331 and MHO0331. At the time of ICP creation an NSP identifier is assigned.

Audit commentary

In section 4.6 we identified that 22 ICPs had the incorrect NSP assigned. It is a much better result in comparison with the previous audit, when 79 ICPs had the incorrect NSP assigned in the registry. All 22 ICPs were corrected by the time this report was finalised.

By the time this document was finalised, Electra corrected information in the registry and provided a new LIS files as the evidence of done corrections.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.2 With: 7(4) of Schedule 11.1 From: 16-Aug-17 To: 15-Apr-18	22 ICPs had incorrect NSP assigned Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are recorded as moderate because additional enhancement are required to validate correct NSP assigned to new ICPs. Electra has only two NSPs which are not interconnected. Audit risk rating recorded as low because all errors were corrected. No impact on settlement outcomes

Actions taken to resolve the issue	Completion date	Remedial action status
NSPs updated to be correct		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Correct NSP entered on ICP creation	ongoing	

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

The distributor must advise a customer (or any person authorised by the customer) or embedded generator of the customer or embedded generator's ICP identifier within 3 business days after receiving a request for that information.

Audit observation

Any request from a customer for advice on an ICP for an existing connection is answered immediately, while the customer is on the phone.

Audit commentary

Calls from customers do not happen often but Electra receives many phone calls from traders or electricians asking them to confirm an ICP or asking for additional information or clarification.

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 LIS file dated 16/04/18 was examined. We identified 159 ICPs with identical addresses and 310 ICPs for which the address description does not allow them to be readily located.

Audit commentary

It has been recorded previously as a non-compliance. No GPS coordinates are recorded in the registry which, in this case, would be of assistance. Electra changes addresses to be more meaningful when it comes across such an ICP, but it is not a structured project. It was discussed with Electra, they commented that it is not high priority project.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: 2 of Schedule 11.1 From: 16-Aug-17 To: 15-Apr-18	For 469 ICPs the address descriptions do not allow ICPs to be readily located Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Weak Breach risk rating: 3		
Audit risk rating	**Rationale for audit risk rating**		
Low	The controls are recorded as weak, the addresses are corrected as an operator comes across them, but it is not a structured project. No impact on settlement outcomes. Audit risk rating recorded as low.		
Actions taken to resolve the issue		**Completion date**	**Remedial action status**
Manually try and resolve addresses of ICPs		ongoing	Identified
Preventative actions taken to ensure no further issues will occur		**Completion date**	
Manually try and resolve addresses of ICPs. These are all historical ICPs and can be time consuming.		ongoing	

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

There are no known situations where an ICP could not be de-energised without the de-energisation of another ICP.

Audit commentary

This clause has been in place for a number of years and Electra was always found compliant. The company policy precludes such a situation. Before a new ICP is created, a connection is validated (visually) in WindMil to make sure that such a situation does not occur.

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 types
- *the initial electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).*

Audit observation

The LIS and Metering Information files (PR-255) dated 16th April 2018 were examined to assess compliance.

We identified the following areas where information was incomplete or missing:

1. No UML details in the "Unmetered Load Details – distributor" field in the registry for 5 ICPs but traders recorded daily units. Price category codes indicates that UML is connected
2. 59 ICPs have Import/Export meters installed and programmed as EG. No information recorded by Electra. It is a better result than that noted in the last audit (159). It was corrected before the report was finalised.
3. Initial Electrical Connection Date – not recorded for 22 ICPs. Incorrect for 70 ICPs. These ICPs were created in 1999 so it is rather unlikely that some of them were first electrically connected, for example, in 2013. Our assumption is that it is the date that solar panels were installed. Many of them were corrected before the report was finalised.
4. 21 ICPs assigned to an incorrect NSP like PRM0331 instead MHO0331 and vice versa. Both NSPs form separate balancing areas therefore reconciliation volumes are affected by inaccuracy. The last audit recorded 79. The NSPs were correctly allocated before this report was finalised.
5. 38 ICPs which have recorded solar, but generation capacity was recorded as 0 kW
6. 58 ICPs had "x1" recorded in the Unmetered load Details – distributor" field, which is incorrect.

Audit commentary

Overall the compliance with this clause has improved since the last audit. There is a process in place to address an on-going problem with Initial Electrical Connection Date; It was described in section 3.5

After the audit in Levin, Electra created the field in WindMil to record the Initial Electrical Connection Date (IECD). It will prevent the deleting of already recorded dates in the registry. The IECDs pre 2013 have also been removed.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.6 With: 7(1) of Schedule 11.1 From: 16-Aug-17 To: 15-Apr-18	Incorrect or missing information in the registry for UML, Initial Electrical Connection Date, NSPs Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating:
Audit risk rating	**Rationale for audit risk rating**
Low	Controls are recorded as moderate because there are some improvement which should be made to them. The audit risk is recorded as low because the impact on settlement outcomes is minor.

Actions taken to resolve the issue	Completion date	Remedial action status
IED corrected, NSP corrected	May 2018	Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
UML will take time and potential site visits to correct	Ongoing	

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 new connections process was examined.

Audit commentary

As a part of the new connections process, Electra assigns the actual price category code to the ICP at the time an ICP is created. Electra's network charges are not based on chargeable capacity.

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 LIS file was analysed. GPS coordinates for ICPs are not populated in the registry.

Audit commentary

This clause is not applicable to Electra because GPS coordinates are not populated in 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 new connection process and the LIS file was examined.

Audit commentary

All ICPs are requested by traders. At the time of uploading a new ICP to the registry a proposed trader is recorded and a single price category code assigned.

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

We examined the LIS file and confirm that Electra does not have ICPs with the status "distributor".

Audit commentary

There are no ICPs with the status of "distributor" representing shared unmetered load or a connection to an embedded network. Electra does not allow the connection of shared unmetered load.

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 process was examined. Electra decommissions an ICP upon trader instruction or owner's instruction. A contractor representing the trader goes on site and physically disconnects the installation, removes meters and removes fuses to make the installation safe.

Audit commentary

Electra relies on traders' arrangements and advice from the registry that the status of the ICP was changed to "De-energised – ready for decommissioning. Once it is done Electra changes the status to "decommissioned". Electra provided four examples of decommissioned ICPs. It appears that there is a problem with the event date used by Electra. The date of notification from trader of decommissioning is used as an event date instead an actual date when equipment was physically removed.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.11 With: 20 of Schedule 11.1 From: 16-Aug-17 To: 15-Apr-18	The date of notification from trader of decommissioning is used as an event date instead an actual date when equipment was physically removed. Potential impact: Low Actual impact: Low Audit history: None Controls: Moderate Breach risk rating: 2
Audit risk rating	**Rationale for audit risk rating**
Low	The controls are recorded as weak, the addresses are corrected as an operator comes across them, but it is not a structured project. No impact on settlement outcomes. Audit risk rating recorded as low.

Actions taken to resolve the issue	Completion date	Remedial action status
Non, decommission already occurred		Identified
Preventative actions taken to ensure no further issues will occur	**Completion date**	
Date of last event will be used for decommissioning date, not the day the registry was updated.	ongoing	

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

Code reference

Clause 23 Schedule 11.1

Code related audit information

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

Each entry must specify the date on which each price category code takes effect, which must not be earlier than 2 months after the date the code is entered in the table.

A price category code takes effect on the specified date.

Audit observation

The Price Category Codes table in the registry was examined.

Audit commentary

There are 32 price category codes assigned to Electra. One new price code category code "TC" (controlled for TOU) was uploaded to the registry on 16/02/18. A new price category code took effect 01/05/18.

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 Code table held by the registry was reviewed during this audit.

Audit commentary

Electra did not upload any new Loss Category Codes to the registry since the last audit.

Audit outcome

Compliant

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

Each loss category code must have a maximum of 2 loss factors per calendar month. Each loss factor must cover a range of trading periods within that month so that all trading periods have a single applicable loss factor.

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

Audit observation

The Loss Factor Code table held by the registry was reviewed during this audit. Loss factors have a single value for a whole year, which cover a range of trading periods. There are no seasonal loss factor codes for summer or winter.

Audit commentary

Electra has not changed loss factors since 2011.

Audit outcome

Compliant

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

If the distributor is creating or decommissioning an NSP that is an interconnection point between 2 local networks, the distributor must give written notice to the reconciliation manager of the creation or decommissioning.

If the embedded network owner is creating or decommissioning an NSP that is an interconnection point between 2 embedded networks, the embedded network owner must give written notice to the reconciliation manager of the creation or decommissioning.

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

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

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

Audit observation

Electra did not create a new or decommission any NSP since the last audit.

Audit commentary

There are no plans to create a new NSP in the foreseeable future.

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

The request must be made at least 10 business days before the NSP is electrically connected, in respect of an NSP that is an interconnection point between 2 local networks. In all other cases, the request must be made at least 1 month before the NSP is electrically connected or the ICP is transferred.

Audit observation

Electra has not created a new NSP since the last audit, as described in the previous section, therefore the reconciliation manager was not asked to create a unique NSP identifier.

Audit commentary

Electra has not created a new NSP since the last audit.

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

Electra did not create any new NSP in the last 12 months.

Audit commentary

Electra did not create any new NSP and it is unlikely that it ever will.

Audit outcome

Compliant

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

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

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

Audit observation

Electra did not create any new NSP or transfer an ICP to an NSP that is a point of connection between a network and an embedded network owned by the distributor.

Audit commentary

Electra did not become the owner of embedded network and it is unlikely that it ever will.

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 3 business days after the change takes effect.

Audit observation

Electra has two balancing areas, MHO0331ELECGN and PRM0331ELECGN.

Audit commentary

Examination of the NSP mapping table in the registry showed that there were no changes to the balancing areas since the last audit.

Audit outcome

Compliant

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

Code reference

Clause 27 Schedule 11.1

Code related audit information

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

Audit observation

Electra has not transferred any ICP which resulted in an ICP becoming an NSP.

Audit commentary

Electra did not establish any embedded network. This clause is not applicable. 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 3 business days before the transfer takes effect.

Audit observation

Electra did not transfer any ICPs.

Audit commentary

Electra did not establish any embedded network. This clause is not applicable. 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 1 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

Electra does not have any NSPs that are not connections to the grid for which they are responsible.

Audit commentary

This clause is not applicable to Electra because they do not have responsibility for an NSP that is not a point of connection to the grid. Compliance was not assessed.

Audit outcome

Not applicable

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

Electra does not have any NSPs that are not connections to the grid for which they are responsible.

Audit commentary

This clause is not applicable to Electra. 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 1 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

Since the last audit, Electra did not acquire all or part of a new network.

Audit commentary

This clause is not applicable to Electra. 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

Electra is not responsible for any embedded network.

Audit commentary

This clause is not applicable to Electra. Compliance was not assessed.

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

Electra did not establish any embedded network since the last audit.

Audit commentary

This clause is not applicable to Electra. 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

Audit commentary

This clause is not applicable to Electra. 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

We reviewed the LIS file dated 16/04/2018 to assess if there is any shared unmetered load connected to the network.

Audit commentary

Electra has no shared unmetered load on its network. The company policy is not to allow the installation of shared unmetered load.

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

As described in the above section, there is no shared unmetered load on Electra's network.

Audit commentary

This clause does not apply to Electra. 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 loss factor is calculated as the difference between the delivered units, as reported by Transpower, and the units submitted by traders to the reconciliation manager. They are classed as reconciliation losses, they contain both technical and non-technical losses.

Audit commentary

Electra will be able to accurately calculate 33 kV and zone transformer losses using WindMil when it becomes fully operational. 11kV technical losses will be calculated based on average feeder size and average feeder load. Distribution transformer losses will be calculated using manufactured losses data (Fe and Cu) and average load.

Electra uses rolling losses calculated over the last 12 months. There have been no changes to the network configuration so there have been no changes to the loss factor code since 2006. Electra's network losses are published on their website, which are 6.60%. The Authority provided historic UFE information for the Electra network. The UFE is currently tracking at around +0.3 to +0.4% at the 14 month revision. It is quite consistent from mid-2015. 70% of installations on the network are metered using smart meters.

Audit outcome

Compliant

CONCLUSION

PARTICIPANT RESPONSE