## ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTOR AUDIT REPORT



Prepared by: Allan Borcoski Date audit commenced: 22 October 2020 Date audit report completed: 24 November 2020 Audit report due date: 25-Nov-20

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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 V7.2 issued by the Electricity Authority.

It was evident that exception reporting as discussed in the previous audit has been put in place as corrected historical registry information was noted during the audit period. However there are still more Registry information updates to be addressed. It should be noted a number of discrepancies are a consequence the of updating historical information. An issue noted during the audit was the relatively high quantity of "business as usual" information not populated in the Registry on time during the audit period, such as missing Initial Electrical Connection Date. A recommendation to review and remediate arrangements with contractors has been made in the report regarding this. It appears COVID-19 restrictions may have had an impact on day to day operations.

The audit found seven Non-Compliances, one previous non-compliance was cleared (Management of decommissioning status) and one new non-compliance added (Management of Pricing Codes).

The main issues identified during this audit were:

- 1. Timeliness of the population of Initial Electrical Connection Date
- 2. Timeliness of the population and missing information in the registry for distributed generation

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 16 which results in an indicative audit frequency of 12 months. We agree with this result.

We thank Electra's staff for their full and complete cooperation in this audit.

Audit period was 01 October 2019 to 30 September 2020

## 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 inaccurate and requires correction or is not populated at all	Moderate	Low	2	Identified
Requirement to correct errors	2.2	11.2(2)	A backlog of historical incorrect data identified in the Registry. When corrected in some cases it is identified late and results in backdating transactions in the registry.	Moderate	Low	2	Identified
			The IECD not input to Registry for 43% of new ICPs				
Timeliness of provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	Initial Electrical Connection Date (IECD) is late for 25% of new ICPs.	Weak	Low	3	Identified
Changes to registry information	4.1	8 of Schedule 11.1	A number of registry information updates were greater than 3 business days from the event date.	Weak	Low	3	Identified
ICP location address	4.4	2 of Schedule 11.1	For 363 ICPs the address descriptions do not allow ICPs to be readily located	Moderate	Low	2	Identified
Distributor to provide ICP information to the registry manager	4.6	7(1)(m)(o)(p) of Schedule 11.1	Incorrect or missing information in the registry for distributed generation and IECD	Moderate	Low	2	Identified

Management of Price Category codes	4.12	Clause 23 Schedule 11.1	New price category codes were entered into the registry tables 12 days less than the 2 months required by the code	Moderate	Low	2	Identified		
Future Risk F	Future Risk Rating 16								

Future risk rating	1-2	3-6	7-9	10-19	20-24	25+
Indicative audit frequency	36 months	24 months	18 months	12 months	6 months	3 months

## RECOMMENDATIONS

Subject	Section	Recommendation	Description
Timeliness of provision of Initial Electrical Connection Date	3.5	Review arrangements with approved Network Connection Contractors to ensure IECD are obtained promptly and input to the Registry within code requirement 10 business days.	

## 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**

As above.

## 1.2. Structure of Organisation



## 1.3. Persons involved in this audit

Name	Title	Company
Mark Branagh	Network Planning Engineer	Electra
Marcus Rogers	GIS Operator	Electra
Leon van Greuning	Operation Information Manager	Electra
Allan Borcoski	Electricity Authority Approved Auditor	Borcoski Energy Services 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 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

Discussed with Electra Staff.

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	Networ k type	Start date	No of ICPs
ELEC	MHO0331	Mangahao			MHO0331ELECGN	GN	1/05/11	17,799
ELEC	PRM0331	Paraparaumu			PRM0331ELECGN	GN	1/05/08	28,682

Status	Number of ICPs (08/10/20)	Number of ICPs (29/10/19)	Number of ICPs (03/05/19)
New (999,0)	0	1	17
Ready (0,0)	16	32	56
Active (2,0)	45,536	45,167	45,009
Distributor (888,0)	1	0	0
Inactive – new connection in progress (1,12)	23	35	25
Inactive – electrically disconnected vacant property (1,4)	728	771	734
Inactive – electrically disconnected remotely by AMI meter (1,7)	124	126	118
Inactive – electrically disconnected at pole fuse (1,8)	11	9	4
Inactive – electrically disconnected due to meter disconnected (1,9)	12	13	10
Inactive – electrically disconnected at meter box fuse (1,10)	6	3	3
Inactive – electrically disconnected at meter box switch (1,11)	1	0	0
Inactive – electrically disconnected ready for decommissioning (1,6)	11	302	406
Inactive – reconciled elsewhere (1,5)	0	0	0

Decommissioned (3) 2,741 2,365 2,201
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#### 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 initiated with an online meeting with Electra on 30–31 October 2019. We have followed the Guidelines for Distributor Audits version 7.2, published by the Authority, as at the report date.

Subject	Section	Clause	Non Compliance	Comment
Requirement to provide complete and accurate information	2.1	11.2(1)	Some information in the registry still must be corrected or is not populated at all	Still exists
Requirement to correct errors	2.2	11.2(2)	Incorrect data is identified for some registry fields and corrected but, in some cases, it is identified late and results in backdating transactions in the registry. The IECD needs to be updated within the required time frame	Still exists
Timeliness of provision of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	Initial Electrical Connection Date (IECD) is not recorded for 47.4% of new ICPs. Some IECD populated in the registry are incorrect	Still exists
Changes to registry information	4.1	8 of Schedule 11.1	A number of registry information updates were greater than 3 business days from the event date	Still exists
ICP location address	4.4	2 of Schedule 11.1	For 551 ICPs the address descriptions do not allow ICPs to be readily located	Still exists

#### 1.11. Summary of previous audit

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 ICP addresses, UML, distributed generation and IECD	Still exists
Management of "decommissioning" status	4.11	20 of Schedule 11.1	A high number of ICPs (302) with <b>inactive ready for</b> <b>decommission</b> status in the registry. A number of these have been in this status for over 5 years.	Cleared

## 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 Audit Compliance Report for the audit period, the LIS, PR255 and EDA files 08 October 2020 were checked. We discussed with Electra staff what processes were in place to ensure accurate information was provided to the registry.

#### Audit commentary

Section	Registry Discrepancy
2.2	Some Registry information has been missing or incorrect for some time:
	No IECD in Registry But Active
	• 294 ICPs
	Distributed Generation Incorrect Installation Type
	• 73 ICPs
	Distributed Generation No Capacity in Registry
	• 73 ICPs
	Distributed Generation No Fuel Type in Registry
	• 73 ICPs
3.5	IECD Input to Registry later than 10 busines days
	• 24.9 %
	43% not populated at all during audit period
4.1	Registry information not updated within 3 business days:
	Address 93.4%
	Network 83.9%
	Pricing 96.7%
4.4	Addresses that could not be easily located
	• 363 ICPs
4.6	Distributors to Provide ICP Information to the Registry manager
	No IECD in Registry But Active
	• 196 ICPs
	Distributed Generation Incorrect Installation Type

	• 1 ICP			
	Distributed Generation No Capacity in Registry			
	• 2 ICPs			
	Distributed Generation No Fuel Type in Registry			
	• 1 ICP			
4.12	New price category codes were entered into the registry tables 12 days less than the 2 months required by the code			

## Audit outcome

Non-compliant

NON-COMPLIANCE

Non-compliance	D	escription		
Audit Ref: 2.1 With: Clause:	Inaccurate or missing information in the registry for distributed generation and Initial Electrical Connection Dates not populated in the Registry.			
11.2(1) and 10.6(1)	Potential impact: Low Actual impact: Low			
From: 01-Oct-19 To: 30-Sep-20	Audit history: Multiple Times Controls: Moderate Breach risk rating: 2			
Audit risk rating	Rationale for audit risk rating			
Low Controls recorded as moderate as the exception report enhancer appear to have been effective in some areas. Historical informatic clean up planned at last audit appears to be happening. Although to day information input poor. The audit Risk Rating is assigned a low due to minimal impact on settlement outcomes.			torical information ening. Although day ng is assigned as	
Actions taken to resolve the issue		Completion date	Remedial action status	
	fied ICP's has begun and is red by the end of January	Ongoing	Identified	
The data cleansing in	itiative is ongoing.			
	is taken to ensure no further les will occur	Completion date		

A formal process review has been scheduled. This review will include monthly KPI management reporting and bi-annual quality assurance (QA) checks.	Ongoing	
Electra is committed to ensuring that the information we are responsible for is as accurate as possible but are subject to varying practices of individual Retailers.		

## 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

The Audit Compliance Summary Reports for the audit period, the LIS and EDA files 08 October 2020 were checked. It was discussed with Electra Staff what processes were in place to identify incorrect information in their systems and the registry, and the process to correct that data as soon as practicable.

#### Audit commentary

There was evidence of historical data discrepancies being corrected in the Registry during the audit period, for example addresses, IECDs and decommissioned ICPs. It would suggest that exception reporting tools are in place. For the information that is input to the Registry on time, initial population of information to the Registry appears fine due to error checking at the upload process. Information changes appear to be slow to be actioned and then may require backdating creating more non-compliance. However missing Registry information is building daily as IECDs and distributed generation information for example is not updated within required timeframes becomes non-compliant and then needs to be identified using the exception reports for remedial action. Examples include:

No IECD in Registry But Active

• 294 ICPs

Distributed Generation Incorrect Installation Type

• 73 ICPs

Distributed Generation No Capacity in Registry

• 73 ICPs

Distributed Generation No Fuel Type in Registry

• 73 ICPs

## Audit outcome

Non-compliant

## NON-COMPLIANCE

Non-compliance	D	escription		
Audit Ref: 2.2 With:	Incorrect or missing historical information in the registry across a number of areas.			
Clause:	Potential impact: Low			
11.2(2) and 10.6(2)	Actual impact: Low			
	Audit history: Multiple Times			
From: 01-Oct-19	Controls: Moderate			
To: 30-Sep-20	Breach risk rating: 2			
Audit risk rating	Rationale	for audit risk rati	ng	
Low	Controls recorded as moderate appear not to be effective as t clean up planned at last audit a day information input poor crea Risk Rating is assigned as low outcomes.	hey could be. Hist appears to be occ ating more non-co	orical information urring slowly. Day to mpliance. The audit	
Actions take	n to resolve the issue	Completion date	Remedial action status	
business earlier this y GIS Analyst who star enable us to resource	rsts departed from the year. We have recruited a new ts in December. This will the correction of historical in to day-to-day activities.	Ongoing	Identified	
	s taken to ensure no further es will occur	Completion date		

A formal process review has been scheduled. This review will include monthly KPI management reporting and bi-annual quality assurance checks. Non-compliance on behalf of the Livening Agents and/or Retailers results in a formal notification and feedback process.	Ongoing	
Electra is committed to ensuring that the information we are responsible for is as accurate as possible but are subject to varying practices of individual Retailers.		

## 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 Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

Retailers apply via email to Electra for new ICP connections to the network. Electra monitor the email inbox constantly during the day and typically begin the connection approval and ICP creation the same day. The application is logged in a spreadsheet along with ICP information such as customer, address, retailer and request date. Electra check the proposed connection in the GIS system to confirm the physical location address and if network assets and capacity are available. If no work is required on the network to establish and connect the new ICP and the retailer has provided all information required then the application will be approved. The ICP will be created and loaded into WindMil along with the other information required to be uploaded to the registry. The retailer is notified with the ICP (by email). The retailer will then engage an Electra approved contractor to make the connection to the network.

If work is required to establish a new connection, then the customer via the retailer will be asked to contact an Electra approved contractor to prepare a quote for the work to be completed. Once the customer agrees and pays a deposit for the work to go ahead, the connection is approved and the ICP is created and issued as per the standard process.

#### Audit outcome

Compliant

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

#### **Code reference**

Clause 11.5(3)

#### **Code related audit information**

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

#### Audit observation

The Audit Compliance Report, LIS report and EDA reports 08 October 2020 were checked and discussed with Electra staff. The new connections process was also checked. A random sample of 20 new ICP connection records were also checked.

Retailers apply to Electra for new ICP connections to the network. The application is logged in a spreadsheet along with ICP information such as customer, address, retailer and request date. WindMil is also populated with the information required to be uploaded to the registry. The retailer provides all the information Electra requires to establish a new ICP so once that information is processed by Electra, an ICP is created in the registry and assigned the status of ready. 20 ICPs were randomly selected from ICPs created during the audit period There were no issues found and many ICP requests were responded to in the same day.

## 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 Audit Compliance Report, LIS and EDA reports 08 October 2020 were checked for the audit period and discussed with Electra staff. The new connections process was also checked. A random sample of 20 new ICP connection records were also checked.

## Audit commentary

Retailers apply to Electra for new ICP connections to the network. The application is logged in a spreadsheet along with ICP information such as customer, address, retailer and request date. WindMil is also populated with the information required to be uploaded to the registry. The retailer provides all the information Electra requires to establish a new ICP so once that information is processed by Electra, an ICP is created in the registry and assigned the status of ready. A 7 pm daily file updates the registry with the new ICP information

20 new ICPs were randomly selected and data checked both in WindMil and the registry and no issues were found.

#### 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 Audit Compliance Report, LIS and EDA reports 08 October 2020 were checked for the audit period and discussed with Electra staff. The new connections process was also checked. A random sample of 20 new ICP connection records were also checked.

## Audit commentary

WindMil is populated with the information provided by the retailer and required to establish a new ICP. A 7 pm daily file from WindMil updates the registry with the new ICP static information to create the ICP record and assigned the status of ready.

20 new ICPs were randomly selected and data checked no issues were found.

## 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 Audit Compliance Summary Report, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

453 new ICP connections were made to the Electra Network during the Audit period.

ICPs Connected During Audit PeriodIECD Input to Registry later than 10 busines days		Comment
453	113 (24.9%) connected during the Audit Period	Range 11 to 22 days
	31 Historical updates	Range 11 to 1725 days

Of concern is the 43% of IECD not populated in the Registry at all during the audit period, a similar result as the last audit (see sect 4.6). There is evidence of longstanding historical IECD dates being updated however.

Electra staff advise they continue to suffer from inconsistent work completion reports from connection contractors, varying from same day to monthly reports. The physical connection process is managed by Retailers using Electra approved contractors, however the Retailers do not provide information. Electra implemented a requirement for Retailers to nominate the

approved contractor at ICP application and whilst this allows Electra to follow up it still generally post ICP connection. Evidence was provided confirming that follow up occurred.

Higher new ICP connection volumes during the audit period compared to the previous period were noted.

## Audit outcome

Non-compliant

## NON-COMPLIANCE

Non-compliance	Non-compliance Description			
Audit Ref: 3.5 With Clause: 7(2A) of Schedule	24.9% of Initial Electrical Connection Date (IECD) were populated in the registry more than 10 days after the event and 43% were not recorded at all during the Audit Period.			
11.1	Potential impact: Low			
	Actual impact: Low			
From: 01-ct-19	Audit history: Multiple Times			
To: 30-Sep-20	Controls: Weak			
	Breach risk rating: 3			
Audit risk rating	Rationale for	audit risk rati	ng	
Low	Controls recorded as weak because the actions from the last audit do not appear to have been effective. There is some evidence of historical information clean-up. The audit Risk Rating is assigned as low due to minimal impact on settlement outcomes.			
Actions tal	ken to resolve the issue	Completion date	Remedial action status	
expected to be resoly	ified ICP's has begun and is ved by the end of January 2021.	Ongoing	Identified	
The data cleansing in GIS Analysts departe year. We have recrui in December. This w	use of approved Livening Agents. hitiative is ongoing. One of our ed from the business earlier this ited a new GIS Analyst who starts ill enable us to resource the al information in addition to day-to-			
	ons taken to ensure no further sues will occur	Completion date		

A formal process review has been scheduled. This review will include monthly KPI management reporting and bi-annual quality assurance checks. Non- compliance on behalf of the Livening Agents and/or Retailers now results in a formal notification and feedback process.	
Electra is committed to ensuring that the information we are responsible for is as accurate as possible but are subject to varying practices of individual Retailers.	

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

## Code reference

Clause 11.17

## **Code related audit information**

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

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

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

## Audit observation

The Audit Compliance Summary Report, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

Retailers apply to Electra for new connections and ICPs. This ensures the proposed retailer is recorded in the registry at the time of the initial upload of an ICP to the registry in the 7 pm daily file update from WindMil.

The ICP sample records checked in the registry indicated no significant issues.

#### Audit outcome

Compliant

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

#### Code reference

Clause 10.31

## Code related audit information

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

#### Audit observation

The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

## Audit commentary

Retailers apply to Electra for new connections and ICPs. This request inherently provides Electra with the request to connect the ICP to the network. Once the connection to the network is approved by Electra it issues the ICP to the retailer permitting the retailer to engage one of Electra's approved and authorised contractors to connect and liven the ICP onto the network.

Shared unmetered load is not allowed to be connected onto the Electra network.

## Audit outcome

Compliant

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

#### Code reference

Clause 10.31A

## **Code related audit information**

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

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

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

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

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

#### Audit observation

The new connection process documents were reviewed and discussed with Electra Staff.

#### Audit commentary

Electra Staff state there have not been any requests to temporarily electrically connect any installation during this audit period. Electra Staff are aware of the code requirements in this area.

It is noted that ICPs are not electrically connected to the network by Electra staff. Electra authorise approved contractors to carry out connection work on its network. Retailers issue the job requests to the Electra authorised contractor to connect and liven ICPs onto the network.

#### 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

The Registry NSP table was reviewed along with the LIS report 08 October 2020 and the clause was discussed with Electra Staff.

#### Audit commentary

One new embedded NSP WPH0011 was created by an embedded network owner Waikanae ENE Ltd on the Electra network on 02/07/2020 with its own balancing area WPH0011WENEE.

#### Audit outcome

Compliant

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

#### Code reference

Clause 10.30(A)

#### Code related audit information

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

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

#### Audit observation

The Registry NSP table was reviewed along with the LIS report 08 October 2020 and the clause was discussed with Electra Staff.

Electra Staff state there have not been any requests to temporarily electrically connect any NSP that is not a point of connection to the grid during this audit period.

Electra Staff are aware of the code requirements in this area.

One new embedded NSP WPH0011 was created by an embedded network owner Waikanae ENE Ltd on the Electra network on 02/07/2020 with its own balancing area WPH0011WENEE.

#### Audit outcome

Compliant

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

#### **Code reference**

Clause 1(1) Schedule 11.1

#### **Code related audit information**

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

yyyyyyyyyyxxccc where:

- yyyyyyyyy 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 Audit Compliance Summary Report, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

An MS Access database tool is used to create a unique sequential number combined with the distributor code "EL" to create each ICP Identifier on the Electra network. It was verified that the tool creates ICPs with the correct format.

#### 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 Audit Compliance Summary Report, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

The loss category code is assigned to an ICP when it is first generated in WindMil along with the information required to be uploaded to the registry. A 7 pm daily file updates the registry with the new ICP information, creates the ICP which is assigned the status of READY.

20 new ICPs were randomly selected and data checked both in WindMil and the registry and no issues were found.

## 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 Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

## **Audit commentary**

Retailers apply to Electra for new ICP connections to the network. The retailer provides all the information Electra requires so once that information is processed by Electra an ICP is created in the registry and assigned the status of READY. Electra does not use the NEW status in the registry.

#### 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 Audit Compliance Summary and LIS reports 08 October 2020 and the Registry were checked.

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The Audit Compliance Summary report indicates 2 ICP records (0110011090EL08B and 0110011094EL181) in the Registry that have remained in the READY status for more than 24 months. However a check of the Registry shows that both have been decommissioned.

#### 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
    - o 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

LIS report 08 October 2020 and the Registry were checked.

#### Audit commentary

Electra has an embedded generation station of 37 MW capacity on its network. ICP 0110007806EL3CF Mangahao Power Station. It has the unique loss category code assigned (MHO1).

#### Audit outcome

Compliant

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

#### Code reference

Clause 10.33A(4)

#### Code related audit information

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

#### Audit observation

The Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

Once provided with the ICP by Electra, retailers arrange the physical connection of ICPs to the network using approved Electra contractors that are authorised by Electra to carry out

connection work on the network. The contractors are inherently authorised by the retailer and Electra to connect to the network.

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 10 business days, the notification must be provided no later than the 13<sup>th</sup> business day and be backdated to the date the change took effect.

In the case of decommissioning an ICP, notification must be given by the later of 3 business days after the registry manager has advised the distributor that the ICP is ready to be decommissioned, or 3 business days after the distributor has decommissioned the ICP.

## Audit observation

The Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 and the Registry were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

## **Audit commentary**

The Audit Compliance Summary Report and the EDA file for the audit period identified:

Activity	Total number of updates		No of updates	later than 3BD	Date range of	updates [BD]
	2020	2019	2020	2019	2020	2019
Address	4305	1,137	1378 (32%)	20 (1.8%)	4 to 5425	4 to 2496
Network	2814	1234	1661 (59%)	424 (34.4%)	4 to 5364	4 to 2103
Pricing	19775	503	18050 (91.3%)	40 (8%)	4 to 3192	4 to 721

Of the updates later than 3 business days the following table shows the proportions of Registry data updates for audit period data compared to historical data corrections:

	Updates Within the Audit Period Greater Than 3 days	Number of Historical Data Corrections
Address	1287 (93.4%)	91 (6.6%)
Network	1393 (83.9%)	268 (16.1%)

Pricing	17494 (96.7%)	556 (3.1%)
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There was a significant increase in Registry transaction volumes compared to the previous two years, some of which appears to be due to Registry information clean up.

Electra Staff advise that the reasons for late registry updates include; late contractor job completion information, retailer requests for back dates which have been agreed too, impact of Covid 19 lockdown and the Correction of historic information discrepancies along with the unfortunate effect of generating some non-compliance.

It was noted that pricing changes introduced 1 April 2020 appeared to put pressure on the registry update process. Information changes in the registry are made using a combination of the WindMil registry interface and the Registry web browser interface.

## Audit outcome

Non-compliant

## NON-COMPLIANCE

Non-compliance	Description		
Audit Ref: 4.1	A significant number of registry information updates were greater than 3 business days from the event date. Potential impact: Low Actual impact: Low		
With:			
Clause:			
8 of Schedule 11.1	Audit history: Multiple Times		
From: 01-ct-19	Controls: Weak		
To: 30-Sep-20	Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	Controls recorded as weak because although planned exception report enhancements and some historical information clean-up appear to have happened evidence suggests. It appears high transaction volumes have been a challenge during this audit period. The audit Risk Rating is assigned as low due to minimal impact on settlement outcomes.		
Actions taken to resolve the issue		Completion date	Remedial action status

Electra no longer support requests from Retailers to backdate Registry change requests.	Ongoing	Identified
Our Data Cleansing initiative is affecting the compliance metrics. As this is ongoing it is expected to re-occur.		
Preventative actions taken to ensure no further issues will occur	Completion date	

## 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 Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 and the Registry NSP mapping table were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked

#### Audit commentary

Electra has two NSPs on its network, PRM0331 and MHO0331. The NSP identifier is uploaded into the Registry when ICPs are initially loaded into the Registry as READY.

#### Audit outcome

Compliant

## 4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

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

#### Audit observation

This was discussed with Electra Staff.

#### **Audit commentary**

Queries are received typically by phone or retailer email service request. Emails are usually responded to on the same day. Phone queries about ICPs are usually dealt with immediately

Retailers manage the new connection process, so customers rarely contact Electra directly. Queries from electricians or retailers seeking ICP information or clarification are handled by the call centre initially and more difficult issues are dealt with by the GIS operators who manage the ICPs within Electra.

#### 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 Audit Compliance Summary and LIS reports 08 October 2020 was checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

Electra check the proposed new ICP connections in the GIS system to confirm the physical location address prior to creating the ICP.

However 363 difficult to locate historic addresses were identified as they contain no street number, unit number or property name for guidance. Some improvement from last audit as it appears some Registry address information was corrected during the audit period.

#### Audit outcome

Non-compliant

#### NON-COMPLIANCE

Non-compliance

Description

Audit Ref: 4.4 With:	For 363 ICPs the address descriptions do not allow ICPs to be readily located		
Clause:	Potential impact: Low		
2 of Schedule 11.1	Actual impact: Low		
	Audit history: Multiple Times		
From: 01-Oct-19	Controls: Moderate		
To: 30-Sep-20	Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls recorded as moderate because the exception report enhancements and some historical information clean-up appears to have happened as planned at last audit. The audit Risk Rating is assigned as low due to minimal impact on settlement outcomes.		
Actions taken to resolve the issue		Completion date	Remedial action status
Electra's ICP lifecycle process reflects that ICPs without accurate location information will not be issued.		Ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A plan of work is being established which seeks to resolve the historic issue within the next 6 months.			
A formal process review has been scheduled to include monthly KPI management reporting and bi- annual quality assurance checks.			

## 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 new connection process documents were reviewed and discussed with Electra Staff.

The network connection application process is robust and well documented. The network connection process requires every proposed connection to the network (ICP) to be verified against the GIS to ensure it has a discrete disconnect point and connection to the network prior to an ICP being created.

Electra Staff state there are no known ICPs that could not be electrically disconnected without electrically disconnecting another ICP.

## Audit outcome

Compliant

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

## Code reference

Clause 7(1) Schedule 11.1

## Code related audit information

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

- the location address of the ICP identifier (Clause 7(1)(a) of Schedule 11.1)
- the NSP identifier of the NSP to which the ICP is usually connected (Clause 7(1)(b) of Schedule 11.1)
- the installation type code assigned to the ICP (Clause 7(1)(c) of Schedule 11.1)
- the reconciliation type code assigned to the ICP (Clause 7(1)(d) of Schedule 11.1)
- the loss category code and loss factors for each loss category code assigned to the ICP (Clause 7(1)(e) of Schedule 11.1)
- *if the ICP connects the distributor's network to an embedded generating station that has a capacity of 10MW or more (Clause 7(1)(f) of Schedule 11.1):* 
  - a) the unique loss category code assigned to the ICP
  - b) the ICP identifier of the ICP
  - c) the NSP identifier of the NSP to which the ICP is connected
  - d) the plant name of the embedded generating station
- the price category code assigned to the ICP, which may be a placeholder price category code only if the distributor is unable to assign the actual price category code because the capacity or volume information required to assign the actual price category code cannot be determined before electricity is traded at the ICP (Clause 7(1)(g) of Schedule 11.1)
- if the price category code requires a value for the capacity of the ICP, the chargeable capacity of the ICP as follows (Clause 7(1)(h) of Schedule 11.1):
  - a) a placeholder chargeable capacity if the distributor is unable to determine the actual chargeable capacity
  - b) a blank chargeable capacity if the capacity value can be determined for a billing period from metering information collected for that billing period
  - c) if there is more than one capacity value at the ICP, and at least one, but not all, of those capacity values can be determined for a billing period from the metering information collected for that billing period-

(i) no capacity value recorded in the registry field for the chargeable capacity; and

(ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded

 d) if there is more than one capacity value at the ICP, and none of those capacity values can be determined for a billing period from the metering information collected for that billing period-

*(i) the annual capacity value recorded in the registry field for the chargeable capacity; and* 

(ii) either the term "POA" or all other capacity values, recorded in the registry field in which the distributor installation details are also recorded

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

#### Audit observation

The Audit Compliance Summary and LIS reports 08 October 2020 were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20new ICP connection records were also checked.

#### Audit commentary

WindMil is populated with the information provided by the retailer and required to establish a new ICP. A 7 pm daily file from WindMil updates the registry with the new ICP static information to create the ICP record and assigned the status of ready.

20 new ICPs were randomly selected and data checked no issues were found with the static information.

Further checks identified the following discrepancies:

No IECD in Registry	Distributed Generation	Distributed Generation	Distributed Generation
But Active	Incorrect Installation Type	No Capacity in registry	No Fuel Type in registry
<ul> <li>196 x in Audit period (43.3%)</li> <li>294 x Historical</li> </ul>	<ul> <li>1 x in Audit Period</li> <li>73 x Historical</li> </ul>	<ul> <li>2 x in Audit Period</li> <li>73 x Historical</li> </ul>	<ul> <li>1 x in Audit Period</li> <li>73 x Historical</li> </ul>

453 New ICP connections were made to the Electra network during the audit period.

A similar number of IECDs not populated in the registry as last audit at 43.3%.

A significant quantity of data correction appeared to be carried out during the Audit Period, last audit there were 123 ICPs with distributed generation discrepancies. An improvement.

## Audit outcome

Non-compliant

## NON-COMPLIANCE

Non-compliance	Description
Audit Ref: 4.6 With:	Incorrect or missing information in the registry for distributed generation and Initial Electrical Connection Dates not populated in the
Clause: 7(1)(m)(o)(p) of Schedule 11.1	Registry. Potential impact: Low Actual impact: Low
From: 01-Oct-19	Audit history: Multiple Times Controls: Moderate
To: 30-Sep-20	Breach risk rating: 2
Audit risk rating	Rationale for audit risk rating

Low	Controls recorded as moderate as the exception report enhancements appear to have been effective for DG information along with historical information clean up planned at last audit. The audit Risk Rating is assigned as low due to minimal impact on settlement outcomes.		
Actions tak	en to resolve the issue	Completion date	Remedial action status
A review of the identified ICP's has begun and is expected to be resolved by the end of February 2021. The data cleansing initiative is ongoing.		ongoing	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
A formal process review has been scheduled. This review will include monthly KPI management reporting and bi-annual quality assurance checks. An automated workflow to identify and notify us of the change in billing code between L and B or G is being developed.		Ongoing	
we are responsible for	to ensuring that the information or is as accurate as possible but practices of individual Retailers.		

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 Audit Compliance Summary and LIS reports 08 October 2020 were checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### **Audit commentary**

Electra assigns the actual price category code to the ICP at the time an ICP identifier is created and uploaded to the registry. 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 Audit Compliance Summary and LIS reports 08 October 2020 was checked. The new connection process documents were reviewed and discussed with Electra Staff.

#### Audit commentary

Electra do not populate GPS coordinates in the registry. This clause is not applicable. 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 Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 and the Registry was checked. The new connection process documents were reviewed and discussed with Electra Staff. A random sample of 20 new ICP connection records were also checked.

#### Audit commentary

Once a new ICP connection application has been approved the new ICP will be created in WindMil along with the other information required to be uploaded to the registry via a 7 pm daily file. The ICP is created in the registry with the status of ready and a single Price Category Code.

20 new ICPs were randomly selected and data checked both in WindMil and the registry and no issues were found.

#### 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

LIS report 08 October 2020 and the Registry was checked.

#### **Audit commentary**

Electra created one Distributor ICP on 1/11/2019 that identifies the point of connection between an embedded network and the Electra Network.

ICP 0110011665ELA5A is related to NSP WPH0011 an embedded network operated by Waikanae ENE Ltd.

#### Audit outcome

#### 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 Audit Compliance Summary Reports, LIS and EDA reports 08 October 2020 and the Registry was checked. The disconnection process documents were reviewed and discussed with Electra Staff.

#### Audit commentary

There has been significant improvement in this area since the previous two audits, there are only eleven ICPs with INACTIVE - READY FOR DECOMMISSIONING status compared to the three hundred and two October 2019 and four hundred and six in May 2019.

Customers and contractors request ICP decommission (permanent disconnections from the network) via their retailer. Retailers arrange the physical decommission of ICPs using approved Electra contractors that are authorised by Electra to carry out decommission work on the network. Retailers notify Electra with the completion date and other information about the decommission work completed and request the ICP status in the registry be changed to decommissioned. However, this notification has not always been timely or complete. Electra Staff provided copies of emails between Electra and Retailers following up and checking on decommissions.

It appears the process improvements made prior to the last audit have been effective. There is also evidence of significant work carried out updating the Registry with historical decommission dates during the audit period. There were 284 Registry updates for decommissions between 1 and 5 years old and 87 Registry updates for decommissions during the audit period itself.

#### 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.

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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 checked. This was also discussed with Electra Staff.

#### Audit commentary

During the audit period Electra reviewed its pricing and twelve new price categories were entered into the Registry Price Category Code tables during the audit period with a start date of 1/04/2020 and 12/04/20.

Code	Description	Start Date	Last Updated
MAA	Control 20 - medium user	1/04/2020	12/02/2020
TEVF	EV TOU Low User Fixed	1/04/2020	12/02/2020
TEVM	Control 20 EV low user TOU	1/04/2020	12/02/2020
TEVN	EV TOU Low User Off-Peak	1/04/2020	12/02/2020
TEVO	EV TOU Low User Shoulder	1/04/2020	12/02/2020
TEVP	EV TOU Low User Peak	1/04/2020	12/02/2020
XTEVF	EV Medium user TOU Fixed	1/04/2020	12/02/2020
XTEVM	Control 20 EV TOU medium user	1/04/2020	12/02/2020
XTEVN	EV TOU medium User Off-Peak	1/04/2020	12/02/2020
XTEVO	EV TOU medium User shoulder	1/04/2020	12/02/2020
XTEVP	EV TOU medium user Peak	12/04/2020	12/02/2020
XTM	Control 20 - TOU Medium User	1/04/2020	12/02/2020

The Registry input dates for eleven of the new Price Category Codes were twelve days short of the code required two months. The new codes would have needed to be input into the Registry by 31 January 2020 to be compliant.

#### Audit outcome

Non-compliant

# NON-COMPLIANCE

Non-compliance	Dese	cription	
Audit Ref: 4.12 With:	New price category codes were entered into the registry tables 12 days less than the 2 months required by the code		
Clause 23 Schedule 11.1	Potential impact: Low Actual impact: Low		
From: 01-Oct-19 To: 30-Sep-20	Audit history: None Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	Controls recorded as moderate as the changes had been communicated in advance with Retailers. The audit Risk Rating is assigned as low due to minimal impact on settlement outcomes.		
Actions tak	en to resolve the issue	Completion date	Remedial action status
Staff have been remin	nded to refer to our Pricing	19/11/2020	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Electra has specifically added a section to its Pricing Checklist to identify the rules that require new prices be updated no less than 2 months prior to their active date.		19/11/2020	

# 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 Factor table in the Registry was examined and this was also discussed with Electra Staff.

#### Audit commentary

Electra recalculated the loss factor and a new loss factor 1 was created with a start date of 1 May 2020. The Loss factor table was updated on 26 February 2020.

#### 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 table in the Registry was examined and this was also discussed with Electra Staff.

#### **Audit commentary**

Loss factor have a single value for all trading periods for a year. There are no seasonal loss factor codes for summer or winter. Electra recalculated the loss factor and a new loss factor 1 was created with a start date of 1 May 2020.

#### Audit outcome

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

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

#### Code reference

Clause 11.8 and Clause 25 Schedule 11.1

#### Code related audit information

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

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

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

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

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

#### Audit observation

The NSP Mapping table in the Registry was examined and this was also discussed with Electra Staff.

#### Audit commentary

One new embedded NSP WPH0011 was created by an embedded network owner Waikanae ENE Ltd on the Electra network on 26/12/2019 (and updated on 02/07/2020) with its own balancing area WPH0011WENEE.

#### Audit outcome

Compliant

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

#### **Code reference**

Clause 26(1) and (2) Schedule 11.1

#### Code related audit information

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

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

#### Audit observation

The NSP Mapping table in the Registry was examined and this was also discussed with Electra Staff.

#### Audit commentary

Electra Staff confirm that Electra do not own any embedded networks and did not establish any embedded network that they are responsible for since the last audit.

This clause does not apply to Electra. 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 Mapping table in the Registry was examined and this was also discussed with Electra Staff.

#### Audit commentary

One new embedded NSP WPH0011 was created by an embedded network owner Waikanae ENE Ltd on the Electra network on 26/12/2019 with its own balancing area WPH0011WENEE.

#### 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

This was discussed with Electra Staff.

#### Audit commentary

Electra Staff confirm that Electra do not own any embedded networks and did not establish any embedded network that they are responsible for since the last audit.

This clause does not apply to Electra. 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 3 business days after the change takes effect.

#### Audit observation

The NSP Mapping table in the Registry was examined and this was also discussed with Electra Staff.

#### **Audit commentary**

Electra has two balancing areas, MHO0331ELECGN and PRM0331ELECGN. There were no changes to balancing areas.

#### 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

This was discussed with Electra Staff.

#### Audit commentary

Electra Staff confirmed that Electra did not transfer an ICP which resulted in an ICP becoming an NSP, at which an embedded network connected to a network or an ICP became an NSP that is an interconnection point.

#### Audit outcome

# Compliant

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

#### Code reference

Clause 1 to 4 Schedule 11.2

Code related audit information

If the distributor wishes to transfer an ICP, the distributor must give written notice to the Authority in the prescribed form, no later than 3 business days before the transfer takes effect.

#### Audit observation

This was discussed with Electra Staff.

#### Audit commentary

Electra Staff stated Electra did not transfer any ICPs during the audit period.

Electra Staff advise they are aware of the code requirements.

#### Audit outcome

#### Compliant

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

#### Code reference

Clause 10.25(1) and 10.25(3)

#### **Code related audit information**

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

- there is 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

The Audit Compliance Summary, LIS and EDA reports 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

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

This clause is not applicable. 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

The Audit Compliance Summary, LIS and EDA reports 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

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

This clause is not applicable. 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

The Audit Compliance Summary, LIS and EDA reports 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

Electra Staff confirm that Electra did not acquire all or part of a new network during this audit period.

This clause does not apply 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

The Audit Compliance Summary, LIS and EDA reports 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

Electra Staff confirm that Electra do not own any embedded networks and did not establish any embedded network since the last audit.

This clause does not apply 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

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The Audit Compliance Summary, LIS and EDA reports 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

Electra Staff confirm that Electra do not own any embedded networks and did not establish any embedded network since the last audit.

This clause does not apply 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

The Audit Compliance Summary, LIS and EDA reports 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

Electra Staff confirm that Electra do not own any embedded networks and did not establish any embedded network since the last audit.

#### Audit outcome

# 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 Audit Compliance Summary Reports, LIS report 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### 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

The Audit Compliance Summary Reports, LIS report 08 October 2020 and the Registry were checked. This was also discussed with Electra Staff.

#### Audit commentary

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

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

This was discussed with Electra Staff and the Asset management Plans, Information Disclosure documents and Loss Factor information on the Electra website was reviewed.

#### Audit commentary

Electra's loss factor calculation methodology is based on the requirements as set out in the Electricity Authority's Guidelines on the Calculation and use of Loss Factors for Reconciliation Purposes. The loss Factors are published on the Electra website along with an outline on how they are calculated. Electra's network losses are published as 7.11% with a loss factor of 1.076, a change from the previous 6.6% and 1.071 respectively. It was confirmed that Electra published the loss factor and network losses on their website (in the pricing schedule).

Audit outcome

## PARTICIPANT RESPONSE

Electra will enhance and improve current processes which were developed and implemented since the previous audit to ensure that we better meet the obligations as set by the EA. For the duplicate and hard to find addresses, Electra asked the owners of this private properties to number the unit/shops for the complex however this has never occurred. As retailers come and go, it is not possible to maintain the list with the retailer currently in the shop either.

This would also be a problem with rural properties which are also private properties i.e. Numbering of pump sheds which share the same address.

Electra has also embarked on a data cleansing process and as we identify issues, the cleansing process might continue in bulk until it is resolved.

Electra also received during the COVID restrictions many pricing change requests with the request from the retailers to back date. While we have complied this round, Electra has decided that no back dating will be permitted, and the retailers have been informed as such.

# APPENDIX A - TEMPLATE FOR NON-COMPLIANCE, ISSUES AND RECOMMENDATIONS.

# NON-COMPLIANCE

Non-compliance	Des	cription	
Audit Ref:			
With:	Potential impact: Choose an item.		
	Actual impact: Choose an item.		
From: Click here to	Audit history:		
enter a date.	Controls: Choose an item.		
To: Click here to enter a date.	Breach risk rating:		
Audit risk rating	Rationale for audit risk rating		
Choose an item.			
Actions tak	en to resolve the issue	Completion date	Remedial action status
			Choose an item.
Preventative actions taken to ensure no further issues will occur		Completion date	

# RECOMMENDATION

Recommendation	Description	Audited party comment	Remedial action

# ISSUE

Issue	Description	Remedial action