ELECTRICITY INDUSTRY PARTICIPATION CODE DISTRIBUTOR AUDIT REPORT

For

4VH LTD (VDNZ)

Prepared by: Rebecca Elliot

Date audit commenced: 5 October 2020

Date audit report completed: 3 December 2020

Audit report due date: 06-Dec-20

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EXECUTIVE SUMMARY

This Distributor audit was conducted at the request of **4VH Ltd (VDNZ)** to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11.

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

Most of VDNZ's compliance is reliant on the compliance of TEG & Associates (TEG), as a contractor to VDNZ. Their audit report is to be submitted with this audit. As their audit is more than seven months old, I confirmed that there have been no changes to their processes since the last audit was conducted.

This audit found one non-compliance related to the late status updates for two ICPs which were decommissioned during the audit period.

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

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The matters raised are set out in the table below.

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non- Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Changes to registry information	4.1	Clause 8 Schedule 11.1	Two late status updates.	Strong	Low	1	Identified
Future Risk	Rating	1					

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

RECOMMENDATIONS

Subject	Section	Recommendation	Description
		Nil	

ISSUES

Subject	Section	Issue	Description
		Nil	

1. ADMINISTRATIVE

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

Code reference

Section 11 of Electricity Industry Act 2010.

Code related audit information

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

Audit observation

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

Audit commentary

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

1.2. Structure of Organisation

Smartpower provided an organisational structure for the purposes of the function being audited:

- Bruce Stubbing Director
- Nick Oldham GM Utility Solutions.

1.3. Persons involved in this audit

Auditors:

Name	Title	Organisation
Rebecca Elliot	Lead Auditor	Veritek Limited
Brett Piskulic	Supporting Auditor	Veritek Limited

Personnel assisting in this audit were:

Name	Company
Nick Oldham	Smartpower T/A Energy Direct
Ewa Glowacka	TEG & Associates

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

TEG carries out VDNZ's registry activities and communications.

TEG does not complete all compliance activities on behalf of VDNZ. Specifically, TEG does not calculate loss factors but does load the loss factors provided by VDNZ onto the registry.

1.5. Supplier list

TEG carries out VDNZ's registry activities and communications as described in section 1.4.

1.6. Hardware and Software

This is covered in TEG's audit report.

1.7. Breaches or Breach Allegations

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

1.8. ICP and NSP Data

Review of the NSP table showed VDNZ had the following NSPs:

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of ICPs
VDNZ	KCA0011	Penrod House	PEN1101	VECT	KCA0011VDNZE	EN	1/11/09	15

The list file as at 2/10/20 was reviewed:

Status	Number of ICPs 2020	Number of ICPs 2017	Number of ICPs 2016	Number of ICPs 2015
New (999,0)	0	0	0	0
Ready (0,0)	0	0	0	0
Active (2,0)	15	14	14	14
Distributor (888,0)	0	0	0	0
Inactive – new connection in progress (1,12)	0	0	0	0
Inactive – electrically disconnected vacant property (1,4)	0	0	0	0
Inactive – electrically disconnected remotely by AMI meter (1,7)	0	0	0	0
Inactive – electrically disconnected at pole fuse (1,8)	0	0	0	0
Inactive – electrically disconnected due to meter disconnected (1,9)	0	0	0	0
Inactive – electrically disconnected at meter box fuse (1,10)	0	0	0	0
Inactive – electrically disconnected at meter box switch (1,11)	0	0	0	0
Inactive – electrically disconnected ready for decommissioning (1,6)	0	0	0	0
Inactive – reconciled elsewhere (1,5)	0	0	0	0
Decommissioned (3)	2	0	0	0

1.9. Authorisation Received

VDNZ provided a letter of authorisation to Veritek, permitting the collection of data from other parties for matters directly related to the audit

1.10. Scope of Audit

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

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

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

Functions Requiring Audit Under Clause 11.10(4) of Part 11	Contractors Involved in Performance of Tasks
The creation of ICP identifiers for ICPs.	VDNZ provide new ICPs to TEG & Associates, who update the registry.
The provision of ICP information to the registry and the maintenance of that information.	TEG & Associates
The creation and maintenance of loss factors.	VDNZ calculate loss factors and TEG & Associates update the loss factor table with the values provided.

1.11. Summary of previous audit

VDNZ provided a copy of the audit report from their previous audit, conducted in December 2017 by Rebecca Elliot. The audit confirmed compliance with all required clauses.

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 11.2(1) and 10.6(1)

Code related audit information

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

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

Audit observation

The management of this process is discussed in the TEG contractor report. The registry list file as at 02/10/20, the audit compliance reports for the period 01/12/17 to 31/08/20 and the event detail report for 01/12/17 to 31/08/20, and NSP table were examined to confirm compliance.

Audit commentary

Compliance is recorded for TEG. Examination of the audit compliance reports, and registry list file confirmed compliance.

Audit outcome

Compliant

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

Code reference

Clause 11.2(2) and 10.6(2)

Code related audit information

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

Audit observation

The management of this process is discussed in the TEG contractor report. I also examined a registry list file to confirm compliance.

Audit commentary

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

Audit outcome

Compliant

3. CREATION OF ICPS

3.1. Distributors must create ICPs (Clause 11.4)

Code reference

Clause 11.4

Code related audit information

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

Audit observation

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

The registry data at 02/10/20 and audit compliance reports for the period 01/12/17 to 31/08/20 were reviewed to identify all new connections during the period and check that ICPs were created as required by this clause.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11.5(3)

Code related audit information

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

Audit observation

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

Audit commentary

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

There were three new ICPs created during the audit period, all of these were requested by the customer.

Audit outcome

Compliant

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

Code reference

Clause 11.7

Code related audit information

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

Audit observation

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

The registry data at 02/10/2020 and audit compliance reports for the period 01/12/17 to 31/08/2020 were reviewed to identify all new connections during the period and check that information was provided as required by this clause.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

The new connection process is discussed in the TEG audit report. The registry data at 2/10/2020 was checked to determine the timeliness of the provision of ICP information for VDNZ's new connections.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 7(2A) of Schedule 11.1

Code related audit information

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

Audit observation

The registry data at 02/10/2020 and audit compliance report for the period 01/12/17 to 31/08/2020 were examined to determine the timeliness of the provision of initial electrical connection date information for new connections.

Audit commentary

The initial electrical connection dates were populated within ten days for the three new connections completed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 11.17

Code related audit information

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

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

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

Audit observation

The new connection process was examined in section 3.2.

The registry data as at 02/10/2020 was examined to determine compliance.

Audit commentary

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

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

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

Audit outcome

Compliant

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

Code reference

Clause 10.31

Code related audit information

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

Audit observation

The new connection process was examined in **section 3.2**. The registry data at 02/10/2020 was examined to determine compliance.

Audit commentary

The new connection process requires applications for new connections to be approved by traders. The three new connections which were electrically connected during the report period were reviewed and were approved to be connected by the trader.

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

Audit outcome

Compliant

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

Code reference

Clause 10.31A

Code related audit information

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

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

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

- advising all traders would impose a material cost on the distributor, and
- in the distributor's reasonable opinion, the advice would not result in any material benefit to any of the traders.

Audit observation

The new connection process was examined in **section 3.2**. The registry data at 02/10/2020 was examined to determine compliance.

Audit commentary

There were three new connections identified. All three ICPs had certified metering installations on their initial electrical connection date. No temporary electrical connections were identified.

Audit outcome

Compliant

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

Code reference

Clause 10.30

Code related audit information

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

The distributor must, within 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 NSP table on the registry was examined.

Audit commentary

No new NSPs have been electrically connected during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 10.30(A)

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No new NSPs have been electrically connected during the audit period.

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:

yyyyyyyyyxxccc 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 ICP creation process is discussed in the TEG audit report.

Audit commentary

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

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

The list file was examined to confirm all active ICPs have a single loss category code.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 13 Schedule 11.1

Code related audit information

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

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

Audit observation

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

The registry data at 02/10/2020 was examined to determine compliance.

Audit commentary

Compliance is recorded in the TEG audit report in relation to this clause. All ICPs are generally created at "ready" status once the proposed Trader details have been provided to TEG. ICPs are occasionally created at "new" status if a new NSP going live on the same day as the ICPs. In these instances, the new NSP cannot be allocated to ICPs until the following day. This has not occurred during the audit period.

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

Audit outcome

Compliant

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

Code reference

Clause 15 Schedule 11.1

Code related audit information

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

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

Audit observation

Monitoring of "new" and "ready" status is discussed in the TEG contractor report. The list file was examined.

Audit commentary

This is discussed in the TEG agent report. An examination of the list file found no ICPs at the "new" or "ready" statuses.

Audit outcome

Compliant

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

Code reference

Clause 7(6) Schedule 11.1

Code related audit information

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

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

Audit observation

The registry list file was examined.

Audit commentary

VDNZ does not supply any embedded generators.

Audit outcome

Compliant

4. MAINTENANCE OF REGISTRY INFORMATION

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

Code reference

Clause 8 Schedule 11.1

Code related audit information

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

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

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

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

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

Audit observation

The management of this process is discussed in the TEG contractor report. I also examined the audit compliance reports for the period 02/12/17 to 31/08/20 and the event detail report for 02/12/17 to 31/08/20 to identify late changes to registry information during the audit period.

Audit commentary

Analysis of the registry data and audit compliance reports identified the following:

Status events

Two status updates were identified, excluding updates to "new" and "ready" for new connections.

The two updates were made five business days after the trader's update to "ready for decommissioning" status.

The code changed on 1/11/18 in relation to the Distributor updating an ICP to decommissioned. I have assessed the activity in relationship to this in accordance with the code effective at the time the event occurred.

As the updates occurred after 01/11/18 I have recorded non-compliance as the updates were not made within three business days of the trader's update to "ready for decommissioning" status, which must be processed prior to decommissioning.

Audit outcome

Non-compliant

Non-compliance	Description					
Audit Ref: 4.1	Two late status updates.					
With: Clause 8 Schedule	Potential impact: Low					
11.1	Actual impact: Low					
	Audit history: None					
From: 17-Dec-18	Controls: Strong					
To: 19-Dec-18	Breach risk rating: 1					
Audit risk rating	Rationale for	audit risk rating				
Low	Controls are rated as strong, as they are sufficient to ensure updates are on time most of the time.					
	The risk is low as a small number of ICPs very soon after VDNZ confirmed that the	-	• , ,			
Actions to	aken to resolve the issue	Completion date	Remedial action status			
within 24hrs of the initial	place picked up the status change entry however there was a delay the decommissioning which meant that days late.	19/12/2018	Identified			
Preventative actions take	en to ensure no further issues will occur	Completion date				
	well; however, we have placed more rmation at our end to ensure future					

4.2. Notice of NSP for each ICP (Clauses 7(1),(4) and (5) Schedule 11.1)

Code reference

Clauses 7(1), 7(4) and 7(5) Schedule 11.1

Code related audit information

Under Clause 7(1)(b) of Schedule 11.1, the distributor must provide to the registry manager the NSP identifier of the NSP to which the ICP is usually connected.

If the distributor cannot identify the NSP that an ICP is connected to, the distributor must nominate the NSP that the distributor thinks is most likely to be connected to the ICP, taking into account the flow of electricity within its network, and the ICP is deemed to be connected to the nominated NSP.

Audit observation

The management of this process is discussed in the TEG contractor report. As VDNZ has only one NSP there have been no NSP changes.

Audit commentary

Compliance is recorded in the TEG contractor report. Due to the nature of embedded networks there is no uncertainty regarding the ICP and NSP relationships. A check of the list file confirmed compliance.

Audit outcome

Compliant

4.3. Customer queries about ICP (Clause 11.31)

Code reference

Clause 11.31

Code related audit information

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

Audit observation

The management of customer queries was examined.

Audit commentary

VDNZ does not receive direct requests for ICP identifiers, but if they were received these would be provided immediately.

Audit outcome

Compliant

4.4. ICP location address (Clause 2 Schedule 11.1)

Code reference

Clause 2 Schedule 11.1

Code related audit information

Each ICP identifier must have a location address that allows the ICP to be readily located.

Audit observation

The process to manage address accuracy was examined in the TEG contractor report. The list file was analysed.

Audit commentary

A check of VDNZ's list file found that all ICPs have unique addresses with sufficient information to allow the ICPs to be readily located.

Audit outcome

Compliant

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

Code reference

Clause 3 Schedule 11.1

Code related audit information

Each ICP created after 7 October 2002 must be able to be electrically disconnected without electrically disconnecting another ICP, except for ICPs that are the point of connection between a network and an

embedded network, or ICPs that represent the consumption calculated by the difference between the total consumption for the embedded network and all other ICPs on the embedded network.

Audit observation

The management of this process was examined.

Audit commentary

VDNZ confirm that all ICPs comply with this clause. They have a good understanding of this requirement, and as this network was created post this requirement, this scenario is unlikely to arise.

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)(I) 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 management of this process is discussed in the TEG contractor report.

The registry list file as at 02/10/20 and the audit compliance reports for the period 01/12/17 to 31/08/20 were examined to check for the population of all required information and its alignment with the trader where appropriate e.g. distributed generation, unmetered load if known and shared unmetered load.

Audit commentary

Compliance is recorded in the TEG contractor report. Examination of the list file and audit compliance reports confirmed that ICP information had been populated correctly. There has been no unmetered load or embedded generation added during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 7(3) Schedule 11.1

Code related audit information

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

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

Audit observation

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

The registry data at 02/10/20 was reviewed to identify all new connections during the period and check that pricing information was provided as required by this clause.

Audit commentary

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

The three ICPs connected had pricing information recorded on the registry prior to initial electrical connection.

Audit outcome

Compliant

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

Code reference

Clause 7(8) and (9) Schedule 11.1

Code related audit information

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

Audit observation

The registry data at 02/10/20 was examined to confirm compliance.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 14 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

Processes to manage ICPs at "ready" status were reviewed as part of the TEG agent audit.

The registry data at 02/10/20 was reviewed to identify that all ICPs at "ready" status had a nominated trader and a single price category recorded.

Audit commentary

Analysis of the registry data found no ICPs at the "ready" status. All ICPs that have been at the "ready" status had a nominated trader and a single price category recorded.

Audit outcome

Compliant

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

Code reference

Clause 16 Schedule 11.1

Code related audit information

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

Audit observation

The registry list file as was reviewed to identify any ICPs at distributor status.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 20 Schedule 11.1

Code related audit information

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

Decommissioning only occurs when:

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

Audit observation

The management of this process is discussed in the TEG contractor report. The list file was examined in relation to the use of the decommissioned status, and two ICPs were decommissioned during the audit period.

Audit commentary

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

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

No ICPs are currently at "ready for decommissioning" status.

Audit outcome

Compliant

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

Code reference

Clause 23 Schedule 11.1

Code related audit information

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

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

A price category code takes effect on the specified date.

Audit observation

The price category code table on the registry was examined.

Audit commentary

VDNZ has not created any new price category codes during the audit period.

Audit outcome

Compliant

5. CREATION AND MAINTENANCE OF LOSS FACTORS

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

Code reference

Clause 21 Schedule 11.1

Code related audit information

The distributor must keep the registry up to date with the loss category codes that may be assigned to ICPs on the distributor's network. The distributor must specify the date on which each loss category code takes effect.

A loss category code takes effect on the specified date.

Audit observation

The loss category code table on the registry was examined.

Audit commentary

VDNZ has not created any new loss category codes during the audit period.

Audit outcome

Compliant

5.2. Updating loss factors (Clause 22 Schedule 11.1)

Code reference

Clause 22 Schedule 11.1

Code related audit information

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

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

Audit observation

The loss category code table on the registry was examined.

Audit commentary

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

Loss category code	Start date	Date updated	
VNZL01	01/05/18	27/02/18	
VNZL01	01/05/19	01/03/19	

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

Audit outcome

Compliant

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

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

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

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 26(1) and (2) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No new NSPs were created or transferred during the audit period.

Audit outcome

Compliant

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

Code reference

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

Code related audit information

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No balancing areas were changed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 26(4) Schedule 11.1

Code related audit information

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

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

Audit observation

The NSP table and the registry list were examined.

Audit commentary

No NSPs were created or changed during the audit period. No ICPs had a change of NSP during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 24(2) and (3) Schedule 11.1

Code related audit information

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No balancing areas were changed during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 27 Schedule 11.1

Code related audit information

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

No existing ICPs became NSPs during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 1 to 4 Schedule 11.2

Code related audit information

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

Audit observation

The NSP table and the registry list were examined.

Audit commentary

No ICPs were transferred from other networks during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 10.25(1) and 10.25(3)

Code related audit information

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

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

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

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

Audit observation

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

Audit commentary

Compliance is recorded in the TEG contractor report. The NSP supply point table was reviewed:

Distributor	NSP POC	Description	MEP	Certification Expiry
VDNZ	KCA0011	Penrod House	AMCI	9/10/20

The NSP metering has not been recertified during the audit period. The monitoring of the NSP table is carried out inhouse.

Audit outcome

Compliant

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

Code reference

Clause 10.25(2)

Code related audit information

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

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

Audit observation

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

The NSP table on the registry was examined.

Audit commentary

Compliance is recorded for TEG. No NSPs were created during the audit period.

Audit outcome

Compliant

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

Code reference

Clause 29 Schedule 11.1

Code related audit information

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

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

VDNZ has not acquired any networks.

Audit outcome

Compliant

6.11. Change of MEP for embedded network gate meter (Clause 10.22(1)(b))

Code reference

Clause 10.22(1)(b)

Code related audit information

If the MEP for an ICP which is also an NSP changes the participant responsible for the provision of the metering installation under Clause 10.25, the participant must advise the reconciliation manager and the gaining MEP.

Audit observation

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

Audit commentary

There have been no MEP changes during the audit period.

Audit outcome

Compliant

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

Code reference

Clauses 5 and 8 Schedule 11.2

Code related audit information

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

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

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

Audit observation

The NSP table on the registry was examined.

Audit commentary

VDNZ has not acquired any networks during the period.

Audit outcome

Compliant

6.13. Transfer of ICPs for embedded network (Clause 6 Schedule 11.2)

Code reference

Clause 6 Schedule 11.2

Code related audit information

If the notification relates to an embedded network, it must relate to every ICP on the embedded network.

Audit observation

The NSP table on the registry was examined.

Audit commentary

VDNZ has not acquired any networks during the audit period.

Audit outcome

Compliant

7. MAINTENANCE OF SHARED UNMETERED LOAD

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

Code reference

Clause 11.14(2) and (4)

Code related audit information

The distributor must notify the registry 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 notify the registry and each trader responsible for any of the ICPs across which the unmetered load is shared of the addition or omission of the ICP.

Audit observation

The registry list was examined to determine compliance.

Audit commentary

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

Audit outcome

Compliant

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

Code reference

Clause 11.14(5)

Code related audit information

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

Audit observation

The registry list was examined to determine compliance.

Audit commentary

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

Audit outcome

Compliant

8. CALCULATION OF LOSS FACTORS

8.1. Creation of loss factors (Clause 11.2)

Code reference

Clause 11.2

Code related audit information

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

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

Audit observation

The calculation of loss factors was reviewed.

Audit commentary

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

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

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

Audit outcome

Compliant

CONCLUSION

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

Most of VDNZ's compliance is reliant on the compliance of TEG & Associates (TEG), as a contractor to VDNZ. Their audit report is to be submitted with this audit. As their audit is more than seven months old, I confirmed that there have been no changes to their processes since the last audit was conducted.

This audit found one non-compliance related to the late status updates for two ICPs which were decommissioned during the audit period.

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

PARTICIPANT RESPONSE