

**ELECTRICITY INDUSTRY PARTICIPATION CODE
DISTRIBUTOR AUDIT REPORT**

For

Horizon Networks
NZBN: 9429041051832



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Date audit commenced: 16 March 2022

Date audit report completed: 31 March 2022

Audit report due date: 16-Apr-22

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EXECUTIVE SUMMARY

This Distributor audit was performed at the request of **Horizon Networks (Horizon)** to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at Horizon’s premises in Whakatane on March 16th, 2022.

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

This audit found eight non-compliances and makes two recommendations. There was a period from late 2021 to early 2022 where staff changes led to more late registry updates than normal. These staffing issues are now resolved, and timeliness of registry updates is back to normal.

Controls are generally strong and there were only a small number of improvement suggestions made during the audit. There is now a spreadsheet being used to track the progress of all new connections and distributed generation installations, which is a further improvement to the controls.

One of the recommendations is regarding the connection of new streetlights, where Horizon’s expected process doesn’t seem to be followed. I recommend this process is improved to ensure all relevant parties are aware that lights are connected.

The number of unauthorised and unknown distributed generation connections is growing. I have repeated a recommendation made several years ago that the Authority changes the Code to ensure distributed generation installations are not installed without metering and without all parties being aware of the installation. The additional benefit of this change will be a reduction in the risk of electrocution due to potentially unsafe installations which may not be inspected, and which could be hazardous.

Issue	Description	Remedial action
Distributed generation	There are a large number of unauthorised distributed generation installations being connected.	<p>I recommend the Code is changed as follows:</p> <p>The distributor approval should only be provided once the following criteria have been met:</p> <ol style="list-style-type: none"> 1. the proposed installation is of an approved type, 2. a trader has agreed to the installation of distributed generation, and 3. import/export metering is installed, or the trader has provided evidence the ICP is on the gifting register. <p>Once approval has been provided to install the generation installation, it cannot be electrically connected without permission from the trader and the distributor, and this permission cannot be more than three business days old.</p> <p>The gifting register needs to be published and available to all participants.</p>

The next audit frequency table indicates that the next audit be due in 12 months. I have considered this result in conjunction Horizon’s responses, and I recommend that the next audit be in 18 months’ time.

The matters raised are shown in the table below:

AUDIT SUMMARY

NON-COMPLIANCES

Subject	Section	Clause	Non-Compliance	Controls	Audit Risk Rating	Breach Risk Rating	Remedial Action
Complete and accurate information	2.1	11.2(1)	Registry information not complete and accurate in all instances.	Strong	Low	1	Cleared
Participants may request distributors to create ICPs	3.2	11.5(3)	23 of 78 ICPs since July 2021 not created within three business days.	Strong	Low	1	Cleared
Provision of information to the registry	3.3	11.7	One initial electrical connection date missing.	Strong	Low	1	Cleared
Timeliness of Provision of ICP Information to the registry	3.4	7(2) of Schedule 11.1	Two ICPs made "Ready" after electrical connection.	Strong	Low	1	Identified
Population of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	60 (18.6%) late initial electrical connection date updates.	Moderate	Low	2	Identified
Changes to registry information	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Moderate	Low	2	Identified
ICP addresses	4.4	2 of Schedule 11.1	Two active ICPs with addresses that are not readily locatable.	Strong	Low	1	Identified
Distributors to Provide ICP Information to the Registry manager	4.6	7(1)(p) of Schedule 11.1	One initial electrical connection date missing. Three incorrect initial electrical connection dates.	Moderate	Low	2	Cleared
Future Risk Rating						11	
Indicative Audit Frequency						12 months	

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
Connection and electrical connection of streetlight circuits	3.7	Strengthen the process for new streetlight connections to ensure they are not connected or electrically connected without the process being followed and without all relevant parties being aware.
Monitoring ready for decommissioning status	4.1	Monitor the registry notification files to identify ICPs changed to "ready for decommissioning".

ISSUES

Subject	Section	Recommendation	Description
Distributed generation	4.6	There are a large number of unauthorised distributed generation installations being connected.	<p>I recommend the Code is changed as follows:</p> <p>The distributor approval should only be provided once the following criteria have been met:</p> <ol style="list-style-type: none"> 1. the proposed installation is of an approved type, 2. a trader has agreed to the installation of distributed generation, and 3. import/export metering is installed, or the trader has provided evidence the ICP is on the gifting register. <p>Once approval has been provided to install the generation installation, it cannot be electrically connected without permission from the trader and the distributor, and this permission cannot be more than three business days old.</p> <p>The gifting register needs to be published and available to all participants.</p>

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

I checked the Authority's website to identify any exemptions in place.

Audit commentary

Horizon has no exemptions in place that are relevant to the scope of this audit.

1.2. Structure of Organisation

Horizon provided an organisation chart.

1.3. Persons involved in this audit

Auditor:

Steve Woods

Veritek Limited

Electricity Authority Approved Auditor

Horizon personnel assisting in this audit were:

Name	Title
Shane Piaray	Operations Manager
Wendy Waller	Commercial Analyst
Hannah Wipaki	New Connections and ICP Registry Administrator
Sanaullah Farooq	Regulatory and Pricing Analyst
Allan Murphy	Network Controller

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

Horizon subcontracts contractors to conduct connection and energisation activities on their network. This matter was discussed during the audit to ensure Horizon understands their responsibilities under this clause.

Audit commentary

Horizon has maintained responsibility for all of their obligations during the audit period. Compliance is confirmed.

1.5. Supplier list

The list of contractors is shown below:

- Horizon Services Limited, and
- Watt Electrical.

1.6. Hardware and Software

Horizon provided the following information detailing hardware and software used in the processes to be audited.

The management of ICPs is maintained in a system called "NMS Billing", which is an MS Access application linked to an SQL Server database. A new billing platform has been adopted during the audit period. This uses the registry information to bill from rather than the "NMS Billing" platform. The validation between the registry and the "NMS Billing" platform is unchanged and is discussed in **section 2.1**. This is outside of the audit scope and therefore no material change was required.

All software resides on an IBM X3650 M3 server with redundant PSU, redundant CPUs, and large raid array for maximum hardware redundancy / failover.

Horizon's backup arrangements are in accordance with normal industry protocols.

1.7. Breaches or Breach Allegations

Horizon confirmed they have no breach allegations recorded by the Electricity Authority, which are relevant to this audit.

1.8. ICP and NSP Data

The table below lists the relevant NSPs and their associated balancing areas:

Distributor	NSP POC	Description	Parent POC	Parent Network	Balancing Area	Network type	Start date	No of active ICPs
HEDL	ANIO331	ANIWHENUA	EDG0331	HEDL	BALANC1HEDLG	I	01-05-08	0
HEDL	EDG0331	EDGECECUMBE			BALANC1HEDLG	G	01-05-08	16,561
HEDL	KAW0111	KAWERAU			BALANC1HEDLG	G	01-05-08	3,070
HEDL	WAI0111	WAIOTAHI			BALANC1HEDLG	G	01-05-08	4,360
HEDL	WAI0501	WAIOTAHI			WAI0501HEDL	G	02/07/18	1,088

Horizon has no embedded networks connected and one interconnection point. The certification of this interconnection point is discussed in **section 6.8**.

Horizon provided a list of all ICPs as of February 2022 by way of a registry “list file”. A summary of this data by “ICP status” is as follows:

Status	Number of ICPs (2022)	Number of ICPs (2020)	Number of ICPs (2019)
New (999,0)	1	0	0
Ready (0,0)	8	2	7
Active (2,0)	25,079	24,826	24,664
Distributor (888,0)	0	0	0
Inactive – new connection in progress (1,12)	15	16	5
Inactive – electrically disconnected vacant property (1,4)	351	348	328
Inactive – electrically disconnected remotely by AMI meter (1,7)	78	60	57
Inactive – electrically disconnected at pole fuse (1,8)	43	55	53
Inactive – electrically disconnected due to meter disconnected (1,9)	29	29	30
Inactive – electrically disconnected at meter box fuse (1,10)	22	38	49
Inactive – electrically disconnected at meter box switch (1,11)	7	12	7
Inactive – electrically disconnected ready for decommissioning (1,6)	38	18	19
Inactive – reconciled elsewhere (1,5)	1	1	1
Decommissioned (3)	2,585	2,498	2,464

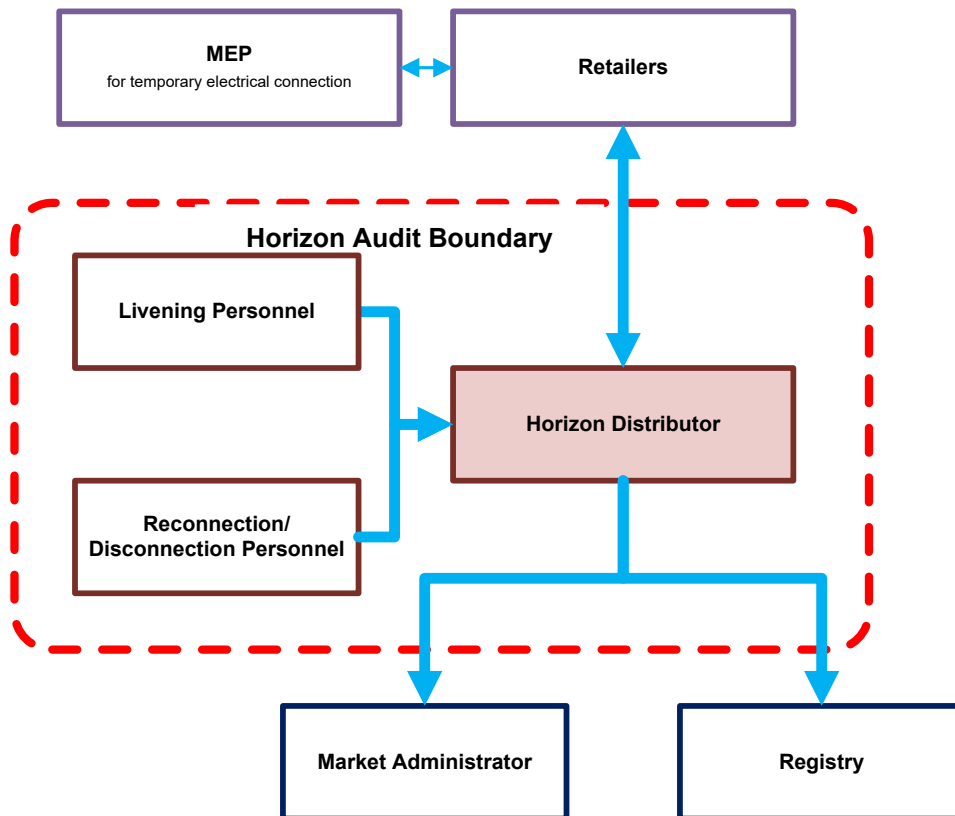
1.9. Authorisation Received

An email of authorisation was provided 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 Horizon to encompass the Electricity Industry Participation Code requirement for an audit, in accordance with clause 11.10 of part 11. The audit was carried out at Horizon’s premises in Whakatane on March 16th, 2022.

The scope of the audit is shown in the diagram below, with the Horizon audit boundary shown for clarity.



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

1.11. Summary of previous audit

Horizon provided a copy of their previous audit, conducted in October 2020 by Rebecca Elliot of Veritek Ltd. The current statuses of the last audit's findings are detailed in the tables below:

Table of Non-Compliance

Subject	Section	Clause	Non-compliance	Status
Complete and accurate information	2.1	11.2(1)	Registry information not complete and accurate in all instances.	Still existing
Provision of information to the registry	3.3	11.7	15 initial electrical connection dates missing.	Still existing for different ICPs
Population of Initial Electrical Connection Date	3.5	7(2A) of Schedule 11.1	32 (16%) late initial electrical connection date updates.	Still existing
Changes to registry information	4.1	8 Schedule 11.1	Updates to registry backdated greater than 3 business days of the event.	Still existing
ICP addresses	4.4	2 of Schedule 11.1	Six active ICPs with addresses that are not readily locatable.	Still existing
Distributors to Provide ICP Information to the Registry manager	4.6	7(1)(p) of Schedule 11.1	15 initial electrical connection dates missing. Five incorrect initial electrical connection dates.	Still existing for different ICPs

Table of Recommendations

Subject	Section	Recommendation for improvement	Status
Distributors to ICP information to the registry	4.6	Require COC be provided for all distributed generation connections.	Cleared

2. OPERATIONAL INFRASTRUCTURE

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

Code reference

Clause 11.2(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 Part 11 is:

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

Audit observation

Horizon's data management processes were examined. The list file as of 25 February 2022 and audit compliance report for the audit period of 1 October 2020 to 23 February 2022 were examined to confirm compliance.

Audit commentary

A discrepancy report is run weekly comparing the registry with Horizon's database and any discrepancies identified are investigated. The audit compliance reporting is also used to identify potential discrepancies.

A small number of initial electrical connection discrepancies (one missing initial electrical connection date and three incorrect dates) were found, and two ICPs were not created at "ready" as expected. This suggests that there are still some small improvements that can be made to the validation processes.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 2.1 With: Clause 11.2(1) From: 01-Oct-20 To: 23-Feb-22	Registry information not complete and accurate in all instances. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1
Audit risk rating	Rationale for audit risk rating
Low	The controls are rated as strong because they have been strengthened during the audit period, but there are still small improvements that can be made. The audit risk rating is low as the volume and impact of the discrepancies will have a minimal impact on settlement.

Actions taken to resolve the issue	Completion date	Remedial action status
Updates/corrections completed during audit	18/03/2022	Cleared
Preventative actions taken to ensure no further issues will occur	Completion date	
To prevent initial electrical connection discrepancies, the new process involves tracking new connection registry timeframes in a newly developed spreadsheet to ensure each step of the process is validated. A weekly report is also issued by the regulatory team to highlight any discrepancies/delays. The administrator will then investigate, review, and correct the registry records.	18/03/2022	

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

Code reference

Clause 11.2(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

Horizon's data management processes were examined. The list file as of 25 February 2022 and audit compliance report for the audit period of 1 October 2020 to 23 February 2022 were examined to confirm compliance.

Audit commentary

Any incorrect data is corrected upon discovery. I did not identify any examples where errors were not corrected as soon as practicable.

Audit outcome

Compliant

2.3. Removal or breakage of seals (Clause 48(1A) and 48(1B) of Schedule 10.7)

Code reference

Clause 48(1A) and 48(1B) of Schedule 10.7

Code related audit information

If the distributor provides a load control signal to a load control switch in the metering installation, the distributor can remove or break a seal without authorisation from the MEP to bridge or un-bridge the load control device or load control switch – as long as the load control switch does not control a time block meter channel.

If the distributor removes or breaks a seal in this way, it must:

- *ensure personal are qualified to remove the seal and perform the permitted work and they replace the seal in accordance with the Code*

- *replace the seal with its own seal*
- *have a process for tracing the new seal to the personnel*
- *notify the metering equipment provider and trader.*

Audit observation

Processes for removal or breakage of seals were reviewed.

Audit commentary

When fault work is required, the customer contacts their trader and the trader's contractors conduct the necessary work, which may involve bridging of load control switches. Horizon Services Limited is one of the contractors and may be requested to conduct this work, but it is not conducted as a distributor.

Audit outcome

Compliant

2.4. Provision of information on dispute resolution scheme (Clause 11.30A)

Code reference

Clause 11.30A

Code related audit information

A distributor must provide clear and prominent information about Utilities Disputes:

- *on their website*
- *when responding to queries from consumers*
- *in directed outbound communications to consumers about electricity services and bills.*

If there are a series of related communications between the distributor and consumer, the distributor needs to provide this information in at least one communication in that series.

Audit observation

I checked all relevant communication methods to ensure compliance is achieved.

Audit commentary

The website contains a page with the Utilities Disputes contact details. This page is accessed from a link on the home page.

Outbound communications to consumers contain appropriate details. I checked three different types of communication to confirm this.

The IVR message was provided, and this contains appropriate information.

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 was examined in detail and is described in **section 3.2** below. 78 new connection applications of the 338 created were checked from the point of application through to when the ICP was created. There are no embedded networks on the Horizon network therefore there are not any LE ICPs.

Audit commentary

The process in place is robust and has good controls. The sample checked in **section 3.2** below confirms this.

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 was examined in detail. 78 new connection applications of the 338 created during the audit period were checked from the point of application through to when the ICP was created. These were selected using the "NC1" spreadsheet, which was created in July 2021 and contains all details for new connections and distributed generation applications. The spreadsheet enables Horizon to track the progress of new connections. I checked all new connections from July 2021.

Audit commentary

The new connection process has not changed during the audit period. An "application for service" (NC1) is received from the electrician or the customer. No applications are received directly from traders. These are reviewed and if the network requires work to be done the ICP is not created until this is complete. The "new" status is not normally used. The "application for service" is sent to the trader to accept the nomination. Once Horizon has this approval, plus confirmation that payment has been made by the customer (if required) and notification has been received that the installation is ready to connect, the ICP

is created. Once the ICP is electrically connected, a copy of the liveness notification is provided to Horizon and the retailer.

23 ICPs were created later than three business days. These were all during the November 2021 to February 2022 period when the responsibility for the management of new connections was being handed over to a new staff member. This is expected to be a one-off issue and it appears the timeliness issues are now resolved.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.2 With: Clause 11.5(3) From: 07-Sep-21 To: 08-Mar-22	23 of 78 ICPs since July 2021 not created within three business days. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are recorded as strong at the time of the audit. The NC1 tracking spreadsheet along with staff training and the support of the previous person managing new connections means the process is now functioning as it used to. The impact on settlement and participants is minor; therefore, the audit risk rating is low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Updates/corrections completed during audit		18/03/2022	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	
To ensure the creation of an ICP identifier is completed within 3 business days all new NC1 (New Connection request) are tracked through a tracking spreadsheet to ensure each step of the process is completed within the required timeframes. A weekly report is also issued by the regulatory team to highlight any delays/discrepancies. The administrator will then investigate, review, and correct the records in the registry as required.		18/03/2022	

3.3. Provision of ICP Information to the registry (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 for populating all required registry fields was examined. The list file for all ICPs created and the audit compliance reporting for 1 October 2020 to 23 February 2022 were examined.

Audit commentary

The registry is updated directly for all ICPs. There were 323 electrically connected new connections. The audit compliance report found two ICPs that had no initial electrical connection dates populated. These were examined. One has since been populated. No notification had been received from the livening agent for ICP 1000028372BP629. The contractor was contacted immediately after the audit and a livening sheet is expected to be provided very soon.

For all new connections carried out by Nova, the electrical connection paperwork comes via Nova rather than direct from the livening agent due to the MEP's process. This can cause delays. The missing initial electrical connection date is recorded as non-compliance below and in **section 4.6**.

The accuracy of the information provided is detailed in **section 4.6**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.3 With: Clause 11.7 From: 30-Nov-21 To: 16-Mar-22	One initial electrical connection date missing. Potential impact: Low Actual impact: Low Audit history: Once Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong. The audit compliance report is monitored and an additional "NC1" spreadsheet is now in place to track all new connections. There is no impact on settlement. The only potential impact is where a trader may wish to compare their active date to the IECD, so the impact is considered minor, leading to an audit risk rating of low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Updates/corrections completed during audit		18/03/2022	Cleared
Preventative actions taken to ensure no further issues will occur		Completion date	

<p>To prevent a similar issue in the future, all new connections are tracked through the NC1 spreadsheet, and a service level agreement established with the livening agent. To ensure compliance the administrator will highlight any missing information to the livening agent and ensure these are updated. A weekly report is issued by the regulatory team, the administrator will investigate, review, and correct any delays/discrepancies identified.</p>	<p>18/03/2022</p>	
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3.4. Timeliness of Provision of ICP Information to the registry (Clause 7(2) of Schedule 11.1)

Code reference

Clause 7(2) of Schedule 11.1

Code related audit information

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

Audit observation

The new connection process was examined. The registry list for 25 February 2022 and the registry compliance audit report 1 October 2020 to 23 February 2022 were examined to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

The audit compliance report identified two ICPs made “ready” after electrical connection. In both cases the registry was populated prior to electrical connection but it appears a field was not populated, leading to the ICPs being created at “new” rather than the intended “ready” status.

Audit outcome

Non-compliant

Non-compliance	Description	
<p>Audit Ref: 3.4 With: Clause 7(2) of Schedule 11.1 From: 08-Jun-21 To: 19-Sep-21</p>	<p>Two ICPs made “ready” after electrical connection. Potential impact: Low Actual impact: Low Audit history: None Controls: Strong Breach risk rating: 1</p>	
Audit risk rating	Rationale for audit risk rating	
<p>Low</p>	<p>The controls are recorded as strong because they mitigate risk to an acceptable level. The impact on settlement and participants is minor; therefore, the audit risk rating is low.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status

Updates/corrections completed during audit	18/03/2022	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	
To ensure timeliness of provision of ICP information to the registry the new NC1 tracking spreadsheet to ensure each step of the process is validated before and after each registry event. A weekly report is also issued by the regulatory team to highlight any discrepancies. The administrator will then investigate, review, and correct the records.	18/03/2022	

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 no later than 10 business days after the date on which the ICP is initially energised.

Audit observation

The registry list for 25 February 2022 and the audit compliance report for 1 October 2020 to 23 February 2022 were examined to determine the timeliness of the provision of ICP information for new connections. A sample of ten ICPs were examined; five ICPs were an extreme sample and five ICPs were a typical sample.

Audit commentary

The approved livening agents are expected to provide Horizon with a copy of the livening notification post livening. This process is not followed where Nova is the trader and the MEP; in these cases, the electrical connection notifications is first sent to Nova and then sent to Horizon, which can cause delays.

There were 323 initial electrical connection date updates in the event detail report. The audit compliance report identified 60 (18.6%) late updates. The extreme sample checked found they all related to late notification by Nova. The typical example checked found four were due to late notification from Nova and one was due to a processing issue.

The accuracy of these dates is detailed in **section 4.6**.

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 3.5 With: Clause 7(2A) of Schedule 11.1 From: 01-Oct-20 To: 23-Feb-22	60 (18.6%) late initial electrical connection date updates. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as moderate as there are delays from the field that cause Horizon to update the registry late. There is no impact on settlement. The only potential impact is where a trader may wish to compare their active date to the IECD, so the impact is considered minor, leading to an audit risk rating of low.		
Actions taken to resolve the issue		Completion date	Remedial action status
Updates/corrections completed during audit		18/03/2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
The ensure timeliness of provision of initial electrical connection date, the processes have been improved by the administration team and will require follow up with the living agents to ensure we achieve compliance, in addition a service level agreement with the living agent will ensure we have the required information back in time to update the registry records. A weekly report is issued by the regulatory team, the administrator will investigate, review, and correct any discrepancies identified.		18/03/2022	

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 also an NSP, follow the electrical connection process set out in Clause 10.31.

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

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

Audit observation

The new connection process was examined in **section 3.2**.

The registry list for 25 February 2022 and audit compliance report for the audit period of 1 October 2020 to 23 February 2022 were examined to determine the timeliness of the provision of ICP information for new connections.

Audit commentary

Examination of the new connections process confirmed that the process includes a “trader responsibility” step.

The trader has accepted responsibility before the ICP’s have been electrically connected.

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**.

A sample of 78 new electrically connected ICPs of the 323 electrically connected were checked to determine if the ICPs were connected at the request of the trader.

The registry list as of 25 February 2022 was reviewed to confirm that all active ICPs had a trader recorded.

Audit commentary

Horizon’s processes are robust in relation to this clause as an ICP will not be electrically connected without the agreement from the trader, who in turn has agreement with an MEP for the ICP. The list file confirmed that all ICPs at the “ready” status had a trader nominated. There are no ICPs without a proposed trader recorded in the registry.

The connection of streetlight circuits was discussed. All new streetlight circuits are expected to have an application and the ICP to which the lights will be connected should be recorded. Approval for the connection is sought from the council. Liveness dates of these circuits should be provided by the contractor to both Horizon and the council.

This process is not being followed. Streetlights are connected into the nearest pillar box with a separate fuse, and it appears that connection is occurring by Horizon without the permission of the reconciliation participant. This clause refers to connection of ICPs, and a streetlight point of connection is not considered an ICP, therefore compliance is achieved, but a recommendation is made that Horizon strengthens this process in conjunction with the retailers and the councils.

Recommendation	Description	Audited party comment	Remedial action
Connection and electrical connection of streetlight circuits	Strengthen the process for new streetlight connections to ensure they are not connected or electrically connected without the process being followed and without all relevant parties being aware.	New streetlight installations have been completed using the NC1 form and process, however this is not the best solution. To strengthen the process, Horizon Networks will develop an SOP & Streetlight Connection Application form, all new streetlight installations will require an application to be submitted from the applicant(council) and the connection must be approved by the retailer before the streetlights will be electrically connected.	Identified

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 unmetred load, the distributor must advise the traders of the intention to temporarily connect the ICP unless:

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

Audit observation

The new connection process was examined in **section 3.2**. The registry list for 25 February 2022 and the registry compliance audit report for 1 October 2020 to 23 February 2022 were examined to determine.

Audit commentary

Horizon has not identified any examples of temporary electrical connection, and none were identified in the list file or the audit compliance report.

Audit outcome

Compliant

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

Code reference

Clause 10.30

Code related audit information

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

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

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

Audit observation

I checked whether Horizon had connected any NSPs during the audit period.

Audit commentary

Horizon has not connected any NSPs during the audit period.

Audit outcome

Compliant

3.10. Electrical connection of NSP that is not point of connection to grid (Clause 10.30A and 10.30B)

Code reference

Clause 10.30A and 10.30B

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.*

A distributor may only electrically connect an NSP if:

- *each distributor connected to the NSP agrees*
- *the trader responsible for delivery of submission information has requested the electrical connection*
- *the metering installations for the NSP are certified and operational metering*

Audit observation

Horizon has not created any new NSPs during the audit period.

Audit commentary

Horizon has not created any new NSPs 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:

xxxxxxxxxxxccc where:

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

Audit observation

The process for the creation of ICPs was examined.

Audit commentary

All ICPs are created in the appropriate format. The sample checked confirmed compliance.

Audit outcome

Compliant

3.12. Loss category (Clause 6 Schedule 11.1)

Code reference

Clause 6 Schedule 11.1

Code related audit information

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

Audit observation

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

Audit commentary

Each 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. The registry list file as of 25 February 2022 was examined to determine compliance.

Audit commentary

Horizon does not normally use the “new” status for new connections. There is one “new” ICP, which was created at “ready” then changed to “new” when the customer cancelled the new connection.

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 calendar 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 process to monitor ICPs at “new” and “ready” status was reviewed. The registry list as of 25 February 2022 and audit compliance report for the audit period of 1 October 2020 to 23 February 2022 were examined to determine compliance.

Audit commentary

There are no ICPs that have been at “new” or “ready” for more than 24 months. Horizon’s processes for monitoring ICPs at “new” or “ready” for more than 24 months are compliant.

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*

- *the ICP identifier of the ICP*
- *the NSP identifier of the NSP to which the ICP is connected*
- *the plant name of the embedded generating station.*

Audit observation

The list file was examined to identify any embedded generators with a capacity greater than 10MW.

Audit commentary

There is one embedded generator with greater than 10MW on the Horizon network. This has a unique loss factor applied as required by the code.

Audit outcome

Compliant

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

Code reference

Clause 10.33A(4)

Code related audit information

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

Audit observation

Sub clause (4) states that no participant may electrically connect a point of connection without the permission of the Reconciliation Participant. The electrical connection of streetlight circuits, which are a point of connection, was examined.

Audit commentary

The connection of streetlight circuits was discussed. All new streetlight circuits are expected to have an application and the ICP to which the lights will be connected should be recorded. Approval for the connection is sought from the council. Liveness dates of these circuits should be provided by the contractor to both Horizon and the council.

This process is not being followed. Streetlights are connected into the nearest pillar box with a separate fuse, and it appears that approved contractors are electrically connecting without the permission of the reconciliation participant. Horizon is not conducting the electrical connection, but they are conducting the connection, as recorded in **section 3.7**.

Audit outcome

Compliant

3.17. Electrical disconnection of a point of connection (Clause 10.30C and 10.31C)

Code reference

Clause 10.30C and 10.31C

Code related audit information

A distributor can only disconnect, or electrically disconnect an ICP on its network:

- *if empowered to do so by legislation (including the Code)*
- *under its contract with the trader for that ICP or NSP*

- *under its contract with the consumer for that ICP*

Audit observation

The disconnection process was examined.

Audit commentary

Horizon will only undertake an electrical disconnection when a request is received from a trader, or for safety. In both instances Horizon will liaise with the relevant trader.

Audit outcome

Compliant

3.18. Meter bridging (Clause 10.33C)

Code reference

Clause 10.33C

Code related audit information

A distributor may only electrically connect an ICP in a way that bypasses a meter that is in place ("bridging") if the distributor has been authorised by the responsible trader.

The distributor can then only proceed with bridging the meter if, despite best endeavours:

- *the MEP is unable to remotely electrically connect the ICP*
- *the MEP cannot repair a fault with the meter due to safety concerns*
- *the consumer will likely be without electricity for a period which would cause significant disadvantage to the consumer*

If the distributor bridges a meter, the distributor must notify the responsible trader within one business day and include the date of bridging in its advice.

Audit observation

Processes for meter bridging were discussed.

Audit commentary

Horizon is not involved in the meter bridging process. This is conducted by MEPs or contractors to traders.

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 provide notice to the registry of that change.

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

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

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

In the case of decommissioning an ICP, notification must be given by the later of 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 registry list file, audit compliance reporting and the audit compliance report for 1 October 2020 to 23 February 2022 were reviewed to determine compliance. A diverse sample of a minimum of ten (or all if there were less than ten examples) backdated events by event type were reviewed to determine the reasons for the late updates.

The management of NSP changes was examined.

Audit commentary

Horizon updates the registry directly. Their IT platform does not interface to the registry. The audit compliance report was analysed to identify backdated event updates, and found:

Update	Date	Late	% Compliant	Average days
Address	2019	407	99.19%	11.22
	2020	180	52.25%	32.51
	2022	21	95.95%	25.24
Price codes	2019	1,136	49%	15.7
	2020	526	51%	22.4
	2022	103	96%	2.0
Status	2019	8	85%	15.53

Update	Date	Late	% Compliant	Average days
	2020	23	34.29%	15.63
	2022	16	65.22%	7.02
Network (excl. new connection & Distributed Generation)	2019	1	N/A	N/A
	2020	22	N/A	N/A
	2022	9	N/A	N/A
Distributed Generation	2019	72	10%	139.88
	2020	50	19.35%	90.19
	2022	50	7.41%	99.44
NSP changes	2019	3	N/A	N/A
	2020	1	N/A	N/A
	2022	0	N/A	N/A

Address events

The sample checked of these found the event date was not changed, causing the events to be appear backdated.

Pricing Changes

The sample checked of these found that nine were made at the retailer’s request and one was an incorrect event date. The Code now allows price codes to be backdated as long as the trader and the distributor agree.

Status Events

The decommissioning process is discussed in **section 4.11**. I checked all 16 examples where the trader had changed the status to “ready for decommissioning”, but the status was not changed to “decommissioned” within the allowable timeframe. It appears the process for status changes to “decommissioned” could be streamlined. I recommend monitoring the registry notification files to identify changes to “ready for decommissioning”, then investigating these as soon as practicable in order to keep the timeframe as short as possible. The findings are as follows:

- seven were due to waiting for the trader to update the ICP to “ready for decommissioning” but when they were finally updated Horizon did not pick this up within three business days of the trader’s update, making these non-compliant; the process to check for these updates is manual hence more than three business days can elapse before these are identified,
- one was an incorrect event date by the trader which needed to be changed, and
- eight required field investigations prior to being decommissioned.

Recommendation	Description	Audited party comment	Remedial action
Monitoring ready for decommissioning status	Monitor the registry notification files to identify ICPs changed to “ready for decommissioning”.	A weekly report is issued by the regulatory team, the administrator will investigate, review, and correct any discrepancies identified.	Identified

Network events

The network events evaluated excluded those relating to the population of the initial electrical connection dates (discussed in **section 3.5**), NSP changes (discussed below) and the initial network events relating to the creation of ICPs.

The audit compliance report included a great many distributed generation updates which are measured separately below. With these excluded, there were nine “other” late network events recorded. I checked all nine and found they all related to additions made to the “Direct billed status or details” fields. These fields were updated manually in the registry, as billing occurs based off the registry data and not the “NMS billing” database, and this information was required to ensure billing occurred correctly.

As the report included a large number of incorrect events in it, I am unable to determine the compliance percentage.

Distributed Generation

The distributed generation process is described in **section 4.6**. The sample checked found that there was no notification received of these being electrically connected. Horizon monitor the EIEP1 file for distributed generation connections where they have none recorded. They then contact the applicant to request the COC. These delays cause Horizon to update the registry late.

NSP Changes

The audit compliance report did not identify any late NSP changes.

Audit outcome

Non-compliant

Non-compliance	Description
Audit Ref: 4.1 With: Clause 8 Schedule 11.1 From: 01-Oct-20 To: 23-Feb-22	Updates to registry backdated greater than 3 business days of the event. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Moderate Breach risk rating: 2

Audit risk rating	Rationale for audit risk rating		
Low	<p>The audit controls are rated as moderate. The lack of interface to the registry can make timeliness difficult to achieve due to the manual checks in the registry to monitor updates made by other participants and the requirement to manually change the event date can make events appear to be backdated.</p> <p>The audit risk rating is low as there is only a minor impact on participants with late updates.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Updates/corrections completed prior or during audit		18/03/2022	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
<p>Horizon Networks is moving to a new system AXOS registry manager which does interface with the registry, this will help reduce the effort of updating our internal system and the registry. Overall this will strengthen our controls and improve the timeliness. A weekly report is issued by the regulatory team, the administrator will investigate, review, and correct any discrepancies identified.</p>		18/03/2022	

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

Code reference

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

Code related audit information

The distributor must notify the registry of the NSP identifier of the NSP to which the ICP is usually connected under Clause 7(1)(b) of Schedule 11.1.

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 process to determine NSP assignment was discussed. The audit compliance reporting did not identify any ICP's with a potential NSP discrepancy.

Audit commentary

The NSP for each ICP is notified to the registry as part of the new connections process. Part of the engineering approval process is to ensure the correct transformer, and therefore NSP is identified for any particular ICP.

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 discussed to confirm policy.

Audit commentary

Horizon confirms that they have not had any direct requests for ICPs however should this occur and there is no confusion regarding the installation address, then the ICP would be provided immediately. In some situations, these requests would be referred to the relevant retailer.

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 and the audit compliance report was examined. A typical sample of 12 ICPs were examined.

Audit commentary

All addresses are expected to have GPS coordinates to enable them to be readily located. I found 1,495 (5.9%) active ICPs do not have GPS co-ordinates. The audit compliance report confirmed there were no duplicate addresses.

Examination of the list file found two ICPs with addresses that were not readily locatable. One relates to Kaingaroa Forest (ICP 1000022045BP158) and the other relates a geothermal plant (ICP 1000027936BP6EC).

Audit outcome

Non-compliant

Non-compliance	Description		
Audit Ref: 4.4 With: Clause 2 of Schedule 11.1 From: 01-Oct-20 To: 23-Feb-22	Two active ICPs with addresses that are not readily locatable. Potential impact: Low Actual impact: Low Audit history: Multiple times Controls: Strong Breach risk rating: 1		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as strong as the reporting in place provides good visibility of this, so these are addressed. The audit risk rating is low as this has a minor impact on traders because addresses are relied on for meter reading and disconnection purposes.		
Actions taken to resolve the issue		Completion date	Remedial action status
We will investigate the missing GPS locations for identified addresses, these will be verified and updated in the registry		01/06/2022	Investigating
Preventative actions taken to ensure no further issues will occur		Completion date	
A report to identify missing GPS locations has been developed and will be issued by the regulatory team weekly, the administrator will investigate, review, and update any missing GPS locations.		31/03/2022	

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

I checked Horizon's policy and documentation in relation to this clause.

Audit commentary

The AFS and the livening notification both contain details of the network isolation point, which confirms compliance with this clause. Shared service mains are allowed, but individual isolation points are still required.

Audit outcome

Compliant

4.6. Distributors to Provide ICP Information to the Registry (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 one 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):
 - the nameplate capacity of the generator; and
 - the fuel type,
- the initial electrical connection date of the ICP (Clause 7(1)(p) of Schedule 11.1).

Audit observation

The management of registry information was reviewed. The registry list as of 25 February 2022 and audit compliance report for the audit period of 1 October 2020 to 23 February 2022 were reviewed to determine compliance. A typical sample of data discrepancies were checked.

Audit commentary

Registry data validation processes are discussed in **section 2.1**. Horizon updates the registry manually. All ICP information was checked and confirmed compliant unless discussed below.

Initial Electrical Connection Date

323 ICPs have had the initial electrical connection date updated between 1 October 2020 to 23 February 2022. The audit compliance reporting identified four ICPs with date inconsistencies between the initial electrical connection date, the active date and the meter certification date:

ICP	Meter certification date	Initial Electrical Connection date	First Active date	Comments
1000028367BP1CB	23/11/2021	22/11/2021	23/11/2021	Incorrect date entered, now corrected.
1000028348BP340	10/11/2021	08/11/2021	10/11/2021	Incorrect date entered, now corrected.
1000028338BP61D	13/10/2021	12/10/2021	13/10/2021	The living sheet confirms 12/10/21
1000028194BP71B	08/03/2021	09/03/2021	08/03/2021	Incorrect date entered, now corrected.

The three incorrect initial electrical connection dates have been corrected. This is recorded as non-compliance below.

The audit compliance report found two ICPs that had no initial electrical connection dates populated. These were examined. One has since been populated. No notification had been received from the living agent for ICP 1000028372BP629. The contractor was contacted immediately after the audit and

a living sheet is expected to be provided very soon. The missing initial electrical connection dates are recorded as non-compliance below and in **section 3.3**.

The timeliness of provision of information on initial electrical connection date is discussed in **section 3.5**.

Distributed Generation

Horizon requires an application for all distributed generation. All applications have to be approved before allowing distributed generation to be connected to their network, but Horizon is reliant on customers following the process. Once advised by the applicant that distributed generation is installed these are updated on the registry.

Horizon monitors the EIEP1 files to identify distributed generation where none is expected. They then contact the applicant to request the COC. Once these details have been received distributed generation will be recorded on the registry.

Examination of the list file found 382 active ICPs with generation capacity recorded by Horizon. All had the correct installation type, generation capacity and fuel type populated. The timeliness of these updates is discussed in **section 4.1**.

A check of the list file found 44 ICPs where distributed generation is installed but the trader has not updated the profile from RPS to PV1. 39 of these relate to one trader who is known to have an issue with recording the correct profile on the registry. The five remaining ICPs were examined and found that Horizon has been advised that the distributed generation is installed but the registry does not indicate the metering has an injection channel for two ICPs. The audit compliance report identified 47 ICPs where the profile indicates distributed generation is present, but Horizon has none recorded. These were examined and found:

- applications have now been provided for 20 ICPs,
- confirmation has been requested from the customer for six ICPs, and
- no application had been received in 21 instances.; it is likely that these ICPs do not have generation installed.

Horizon intends to investigate those where no application has been received with the trader, and the customer for those where an application has been approved.

I checked the distributed generation information populated on the registry against the paperwork provided for a sample of ten ICPs and confirmed that all had the correct generation capacity, fuel type and effective event date recorded.

The number of unauthorised and unknown distributed generation connections is growing. I have repeated a recommendation made several years ago that the Authority changes the Code to ensure distributed generation installations are not installed without metering and without all parties being aware of the installation. The additional benefit of this change will be a reduction in the risk of electrocution due to potentially unsafe installations which may not be inspected.

Issue	Description	Remedial action
Distributed generation	There are a large number of unauthorised distributed generation installations being connected.	<p>I recommend the Code is changed as follows:</p> <p>The distributor approval should only be provided once the following criteria have been met:</p> <ol style="list-style-type: none"> 1. the proposed installation is of an approved type, 2. a trader has agreed to the installation of distributed generation, and 3. import/export metering is installed, or the trader has provided evidence the ICP is on the gifting register. <p>Once approval has been provided to install the generation installation, it cannot be electrically connected without permission from the trader and the distributor, and this permission cannot be more than three business days old.</p> <p>The gifting register needs to be published and available to all participants.</p>

Unmetered Load

Horizon does not allow any new unmetered load connections on its network.

Horizon uses the recommended format for updating the registry. I compared the daily kWh figures to the traders' daily unmetered kWh figures and found that all matched.

Audit outcome

Non-compliant

Non-compliance	Description		
<p>Audit Ref: 4.6</p> <p>With: Clause 7(1)(p) of Schedule 11.1</p> <p>From: 01-Oct-20</p> <p>To: 23-Feb-22</p>	<p>One initial electrical connection date missing.</p> <p>Three incorrect initial electrical connection dates.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 2</p>		
Audit risk rating	Rationale for audit risk rating		
Low	<p>The controls are rated as moderate. They have been improved during the audit period.</p> <p>The audit risk rating is low as there were only three incorrect initial electrical connection dates identified.</p>		
Actions taken to resolve the issue		Completion date	Remedial action status
Updates/corrections completed during audit		18/03/2022	Cleared

Preventative actions taken to ensure no further issues will occur	Completion date	
The administration process of capturing initial electrical connection date has been changed to achieve compliance, this involves talking to the livening agent and tracking of the process in the NC1 spreadsheet, and a service level agreement established with the livening agent. To ensure compliance the administrator will highlight any missing information to the livening agent and ensure these are updated. A weekly report is issued by the regulatory team, the administrator will investigate, review, and correct any delays/discrepancies identified.	18/03/2022	

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 no later than 10 business days after the trading of electricity at the ICP commences:

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

Audit observation

The new connection process was examined in detail. The registry list and audit compliance report for 1 October 2020 to 23 February 2022 were reviewed to determine compliance.

Audit commentary

The price and loss category are determined by the application details prior to electrical connection. Placeholder values are not used. No ICPs were identified in the audit compliance report with potential price changes relating to post 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

I checked the list file for ICPs with GPS coordinates recorded.

Audit commentary

Most ICPs have GPS co-ordinates. This is provided by the MEP. The coordinates are in NZTM format. I confirmed this by checking a typical example of 15 ICPs using Mobile Roads.

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

Horizon’s current process is to create the majority of ICPs at the “ready” status.

The registry list showed eight ICPs currently at “ready” status, none have been at “ready” status for more than two years. This is discussed further in **section 3.14**.

All ICPs at “ready” status had a single price category assigned and proposed trader identified.

Audit commentary

The status of “ready” is used once the ICP is ready for connection. The new connection process has a step to confirm the trader has taken responsibility. All ICPs only have one price category code.

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

I checked the list file to confirm compliance.

Audit commentary

There are no ICPs with the distributor only status. Previously I noted that there were reported to be some potential private lights identified by Whakatane District Council. Horizon have received no information from the council, and I have been unable to locate any records to confirm that any exist.

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 registry list as of 25 February 2022 was reviewed to identify ICPs at the “decommissioned” or “ready for decommissioning” status.

A diverse sample of five “decommissioned” ICPs was examined. I also examined all 11 ICPs at “ready for decommissioning” status.

Audit commentary

The decommissioning process is managed by Horizon and includes a physical verification that service main, cables and meters are actually removed. The sample checked confirmed that the ICPs were decommissioned for the correct date.

The list file found 11 ICPs are at “ready for decommissioning”. No request has been received for these. Horizon regularly sends requests to traders to lodge a service request, but these are not always actioned.

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

I checked the price category code table for any new or changed codes during the audit period.

Audit commentary

There were no new price category codes.

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

I checked the loss category code table for any new codes during the audit period.

Audit commentary

No new loss factors were created 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 on the registry, the distributor must enter the replaced loss factor on the table in the registry.

Audit observation

I checked the loss category code table for any changed factors during the audit period.

Audit commentary

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

Loss factors were changed with an effective date of 1 April 2021. The notification was made two months prior.

Audit outcome

Compliant

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

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

Code reference

Clause 11.8 and Clause 25 Schedule 11.1

Code related audit information

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

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

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

The notice provided to the reconciliation manager must be provided no later than 30 days prior to the intended date of creation or decommissioning.

If the intended date of creation or decommissioning changes the distributor must provide an updated notice as soon as possible.

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. No NSPs were created or decommissioned by Horizon during the audit period.

Audit commentary

The NSP table on the registry was examined. No NSPs were created or decommissioned by Horizon 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 calendar month before the NSP is electrically connected or the ICP is transferred.

Audit observation

The NSP table on the registry was examined. No NSPs were created or decommissioned by Horizon during the audit period.

Audit commentary

The NSP table on the registry was examined. No NSPs were created or decommissioned by Horizon 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 notify 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. No NSPs were created or decommissioned by Horizon during the audit period.

Audit commentary

The NSP table on the registry was examined. No NSPs were created or decommissioned by Horizon 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 notify the reconciliation manager at least one calendar 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

Horizon has not created any embedded networks.

Audit commentary

Horizon has not created any embedded networks.

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 notify 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. No balancing areas were changed during the audit period.

Audit commentary

The NSP table on the registry was examined. 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 notify any trader trading at the ICP of the transfer at least one calendar month before the transfer.

Audit observation

The NSP table was reviewed.

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 notify the market administrator in the prescribed form, no later than three business days before the transfer takes effect.

Audit observation

The NSP table was reviewed.

Audit commentary

Horizon has not initiated the transfer of any ICPs 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 NSP supply point table was examined, and evidence of all updates made to the Reconciliation Manager via the portal.

Audit commentary

Horizon is not responsible for any metering installations in accordance with this clause.

Audit outcome

Compliant

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

Code reference

Clause 10.25(2)

Code related audit information

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

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Horizon have not connected any new NSPs 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 notify:

- *the previous network owner (Clause 29(1)(a) of Schedule 11.1)*
- *the reconciliation manager (Clause 29(1)(b) of Schedule 11.1)*
- *the market administrator (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 calendar month notification is required before the acquisition (Clause 29(2) of Schedule 11.1).

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

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Horizon have not connected any new NSPs during the audit period.

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 notify the reconciliation manager and the gaining MEP.

Audit observation

The NSP supply point table was reviewed.

Audit commentary

Horizon has not initiated the transfer of any ICPs 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 supply point table was reviewed.

Audit commentary

Horizon has not initiated the transfer of any ICPs during the audit 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 supply point table was reviewed.

Audit commentary

Horizon has not initiated the transfer of any ICPs 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

Horizon does not have any known shared unmetered load. The streetlight audits in the Horizon network were reviewed.

Audit commentary

Horizon does not have any known shared unmetered load. Previously I noted that there were reported to be some potential private lights identified by Whakatane District Council. Horizon have received no information from the council, and I have been unable to locate any records to confirm that any exist.

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 notify all traders affected by that change or decommissioning as soon as practicable after the change or decommissioning.

Audit observation

The registry list file was reviewed to identify any ICPs with shared unmetered load connected.

Audit commentary

Horizon does not have any shared unmetered load.

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.

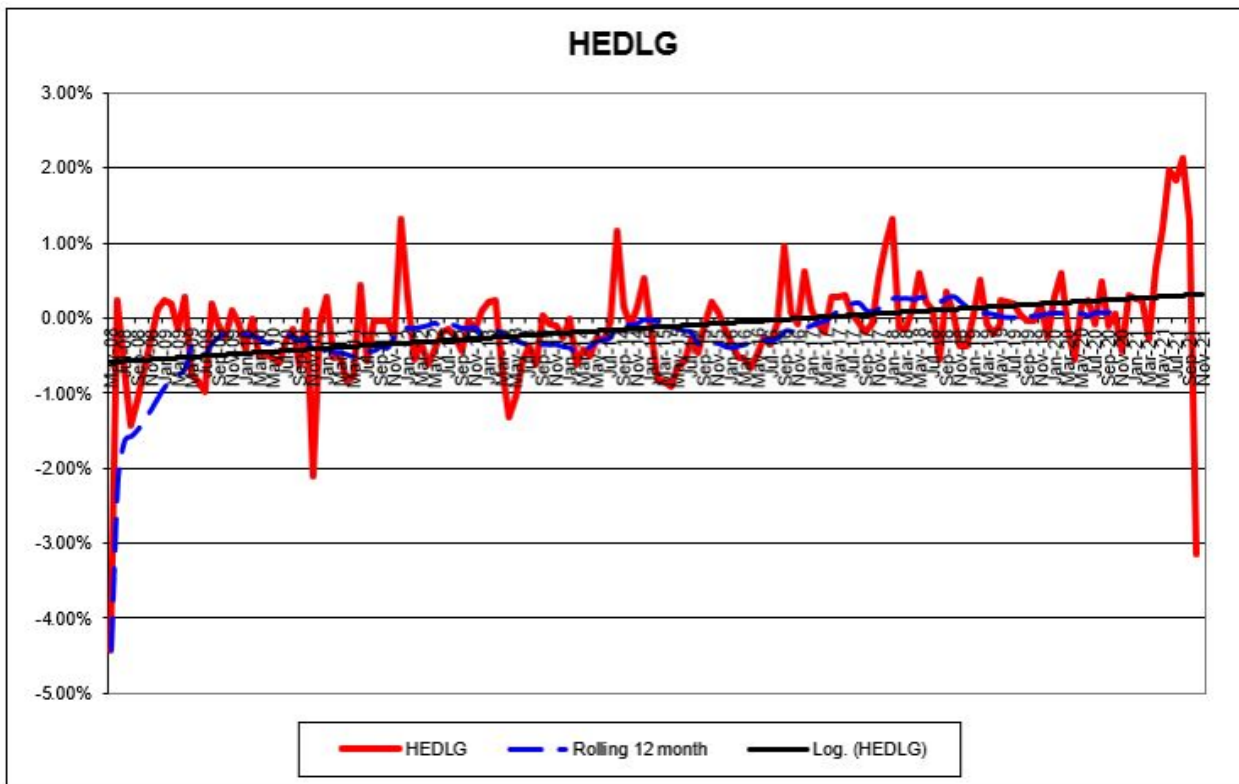
Audit observation

I have assessed Horizon's process and compliance against the guideline's recommended thresholds.

I reviewed the documentation relating to the loss factor review methodology.

Audit commentary

The EA provided the following UFE graph indicating that losses for Horizon are running within the +/- 1% threshold:



Horizon's loss factors are based on reconciliation losses, and they regularly monitor the differences between their loss factors and reconciliation losses.

Audit outcome

Compliant

CONCLUSION

This audit found eight non-compliances and makes two recommendations. There was a period from late 2021 to early 2022 where staff changes led to more late registry updates than normal. These staffing issues are now resolved, and timeliness of registry updates is back to normal.

Controls are generally strong and there were only a small number of improvement suggestions made during the audit. There is now a spreadsheet being used to track the progress of all new connections and distributed generation installations, which is a further improvement to the controls.

One of the recommendations is regarding the connection of new streetlights, where Horizon's expected process doesn't seem to be followed. I recommend this process is improved to ensure all relevant parties are aware that lights are connected.

The number of unauthorised and unknown distributed generation connections is growing. I have repeated a recommendation made several years ago that the Authority changes the Code to ensure distributed generation installations are not installed without metering and without all parties being aware of the installation. The additional benefit of this change will be a reduction in the risk of electrocution due to potentially unsafe installations which may not be inspected, and which could be hazardous.

Issue	Description	Remedial action
Distributed generation	There are a large number of unauthorised distributed generation installations being connected.	<p>I recommend the Code is changed as follows:</p> <p>The distributor approval should only be provided once the following criteria have been met:</p> <ol style="list-style-type: none"> 1. the proposed installation is of an approved type, 2. a trader has agreed to the installation of distributed generation, and 3. import/export metering is installed, or the trader has provided evidence the ICP is on the gifting register. <p>Once approval has been provided to install the generation installation, it cannot be electrically connected without permission from the trader and the distributor, and this permission cannot be more than three business days old.</p> <p>The gifting register needs to be published and available to all participants.</p>

The next audit frequency table indicates that the next audit be due in 12 months. I have considered this result in conjunction Horizon's responses, and I recommend that the next audit be in 18 months' time.

PARTICIPANT RESPONSE